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MODEL RAILWAY JOURNAL

No.106
1998

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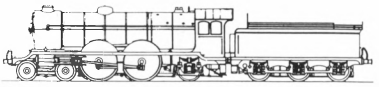

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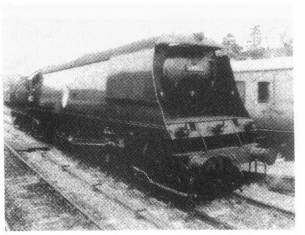

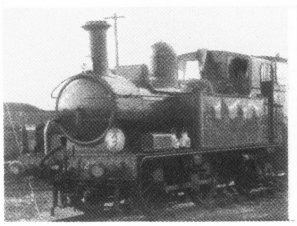

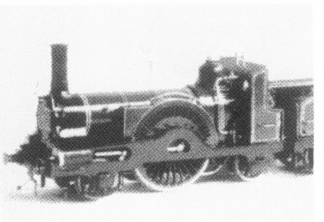

one thing remains the same

4'8½" = 18.83mm =

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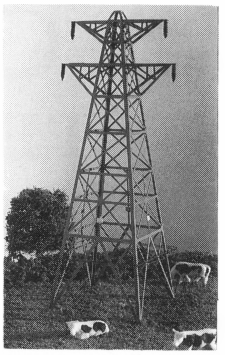

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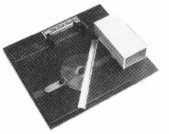

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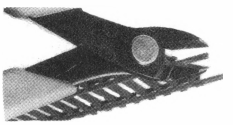

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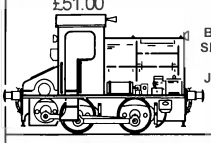

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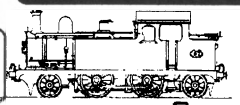

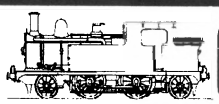

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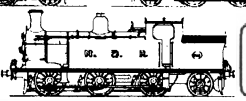

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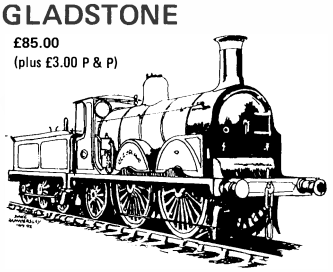

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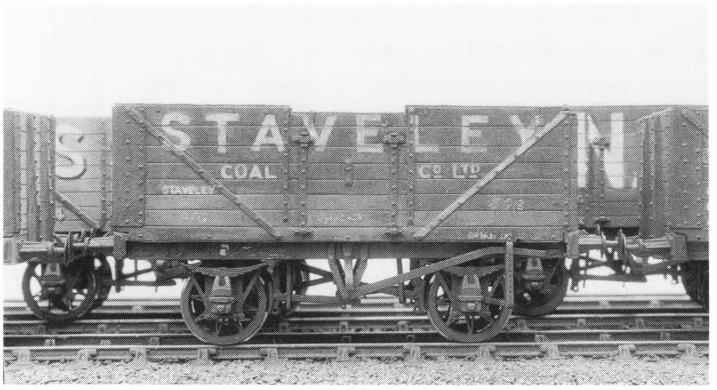
Anyone modelling the pre-1960s steam railway will need a fair percentage of coal wagons as part of their freight stock as coal was the predominant mineral traffic. This book guides the reader through simple kit modification using many of today's after-market products, and goes on to describe full scratchbuilds, all with straightforward text and easy-to-follow step-by-step photographic sequences.

Models built specially for the book portray a variety of wooden-bodied private owner, LNER and LMS coal wagons, and examples of the earlier steel-bodied types, incorporating sprung and compensated suspension systems, etched and cast brake gear, and sprung buffers. The pages contain a host of construction and detailing tips, advice on painting, lettering and weathering, enabling modellers to select the level of detail which suits their individual needs or preference.

Many of the methods can be applied to other types of wagon and other scales, and the inclusion of atmospheric photos of wagons in service through the 1930s, 40s and 50s should ensure this book remains an inspiration.

Details to be announced



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Other titles in preparation for December/January to be announced.

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ISSN 0267-3207 No. 106. 1998

Bandits beware...

With numerous letters during recent years arguing the merits of one standard over another, or this scale over that, I have tried to consider why so many become quite so aggravated when these topics are raised. I model in ScaleSeven because I wish to achieve the highest standard of realism possible with the skills I possess – for if we do not seek to better ourselves, what is the point? On the other side of the coin, there are many who have neither the time nor the inclination to spend limitless hours attempting to achieve that which to them is perceived as the unattainable, perhaps finding other activities challenging enough without complicating life by struggling in their hobbies as well. Perfectly rational and understandable in both cases, with no need for any defensive explanation.

The whole essence of this publication is its ability to stimulate the imagination and encourage those who wish to improve their skills or simply share the experiences of other like-minded folk. However, the recent influx of mail containing vitriolic text penned by the opposing factions, invariably followed by a return of fire from the hills after publication, has left me somewhat exasperated at the seemingly endless desire by some to slag off those who do not share their views. Contributions offering advice and guidance when choosing how best to fulfil one's modelling ambitions will always be welcomed and encouraged, but personal attack from every corner seems just plain bad manners to me. So, if letters come winging their way to me with contents which would turn milk sour, be assured they shall quickly be filed in a suitable repository. Happily, most modellers don't waste their time bickering amongst themselves over choice of occupational therapy, they just get on with it. Works for me!

Having got that off my chest, allow me to wander a path which may or may not lead anywhere. My wife threw a pearl of wisdom into a recent conversation when she suggested that the majority of us who model are seeking to re-live childhood memories – not a new suggestion, I agree – but she followed this up with the question: "What will happen to the hobby in the future when you are all long gone and there is nobody around still able to recall the railways as they once were?" As those in the room turned in her direction and the general hubbub quietened down, she followed this with: "If you are all inspired to model by this nostalgic driving force, will those who don't have that inspiration, because they don't have the memories, simply not bother to build the models?" This set me thinking. As the railways rationalise ever faster and the remaining vestiges of a once inspirational system are lost for ever, what *will* be left to stir the imagination of future generations' modellers? Most of my modelling friends are of a similar age and we can recall the last years of steam, which will no doubt inspire us until our memories fail or we are beyond medical treatment, and, judging by our frequently discussed recollections of 'the golden days of our youth', we shall continue modelling using these memories for fuel. One could argue that many people model pre-grouping railways which they are too young to remember, but at least there is *some* memory of steam as a point of reference.

Picture, then, a model railway club of the future deciding upon its next exhibition layout. The older members wistfully recall the good old days when there used to be a single-line track running by the battered old concrete bus shelter type waiting room – the latter covered in graffiti with beer cans, old newspapers and syringes littering the ground. The younger members listen in awe to these reminiscences, vainly trying to experience the same sense of belonging to a past age . . . somehow the image conjured up doesn't gel and really is more sad than comical as I doubt such memories would galvanise anyone into frantic layout building. Maybe the hobby has no long term future, at least not in the form we would recognise, and this is just the natural progression of things. Will those who gaze upon our models illustrated in dusty magazines in years to come shake their heads in wonder at our compulsion to recreate this particular aspect of the past? Probably – and without the memories, I doubt they shall ever fully comprehend.

Martyn Welch

MODEL RAILWAY JOURNAL

Edited by Martyn Welch. Designed by Paul Karau.

CONTENTS

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MRJ No. 107 should be on sale on 3rd December 1998

SMALL SUPPLIER FORUM

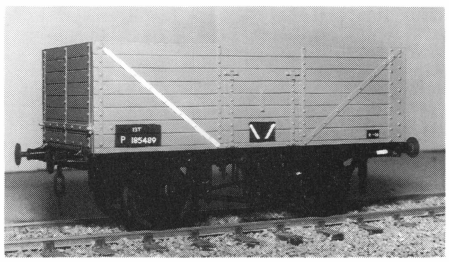
TRADE GRAPEVINE

A recent kit release from COMET MODELS is the first in a series containing ready-to-run locomotive body plus full chassis and tender kit. Starting with a Hornby 8F body with many added or replaced components, tender options include a Fowler flush-sided type, riveted and welded variants of the standard Stanier 4000 gallon tender. Later, a Fowler riveted option will be available. Priced at £67.50 excluding wheels, motor & gearbox or £110.18 with Romford RP25 profiled blackened wheels, GB1 gearbox using Ultrascale gears and Mashima 1620 flat can motor, the kit is available from: 105 Mossfield Road, Kings Heath, Birmingham, B14 7JE (Tel/fax: 0121-242-2233).

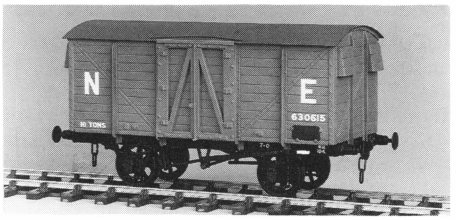
John Brigton, a professional 4mm loco builder, is trading under the name STEAMLINE SHEFFIELD supplying a range of lost wax castings common to the BR Standard locomotive classes plus injectors also used on late LMS locomotives. Some small modifications to the castings and pipe flows are required to suit class variations, but each item is packaged with a photograph illustrating its location on the prototype, which is a novel idea that should prove helpful to the modeller. John will be demonstrating soldering copper pipes to the castings at the Warley NEC show this November. The castings sent for our inspection are priced in the £2.50 to £5 range and details are available from him at 69 Endowood Road, Sheffield, S7 2LY (Tel: 0114-236-6076).

Andy Mullins at BRANCHLINES can now supply 'Black Beetle' ready to run, under-floor mounted bogies ready set up with 18.83/P4 wheel sets. As with earlier OO and EM units, the motive power supplied is a Mashima 12mm flat can motor with 15:1 metal gears plus 12mm nickel silver disc wheels with a 34mm wheelbase suitable for various DMUs on the market and is priced at £32 per unit. Also available are dummy versions of the bogies less motor & gears but using the same wheels and pick-ups for fitting at the other end of a motor coach to improve pick-up performance (£9.95). The 18.83 wheel sets mounted on 26mm pinpoint axles are available separately at £1.50 per axle. Andy has extended his universal jointed drive shaft range with three new combinations: 'A' – 1.5mm x 1.5mm fine type with central 1.5mm steel shaft and sliding joints; 'B' – 1.5mm x 2mm all moulded with clip-together ball joints and sliding, splined shaft; 'C' – 2mm x 2mm version of type 'B'. All are priced at £2.85 per shaft. Last of his new releases is an 18mm x 33mm flat can motor made by Canon (of photographic fame) which is similar to the 18/33 Mashima except the shaft is 8mm long and the 2mm fixing screws are at 13mm centres horizontally and 15mm vertically. Limited stocks currently held cost £15 each. Details of these and other products from P.O. Box 31, Exeter, EX4 6NY (Tel/fax: 01392 437755).

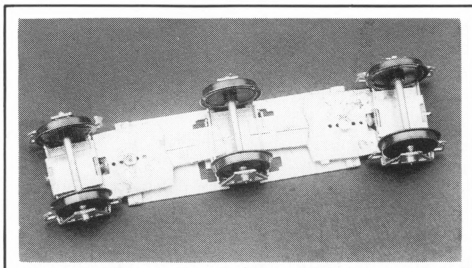
New from PARKSIDE DUNDAS is yet another 7mm kit, this time of an ex PO 13 ton mineral wagon with wooden body and steel underframe. Built during the 'thirties for colliery owners and merchants, they passed into government control during World War 2, then briefly entered NCB ownership before final sale to BR, lasting in traffic until the mid-1960s. The kit (Ref. No. PS33) costs £19.95 from Parkside at Millie Street, Kirkcaldy, Fife, Scotland, KY1 2NL (Tel: 01592 640896).

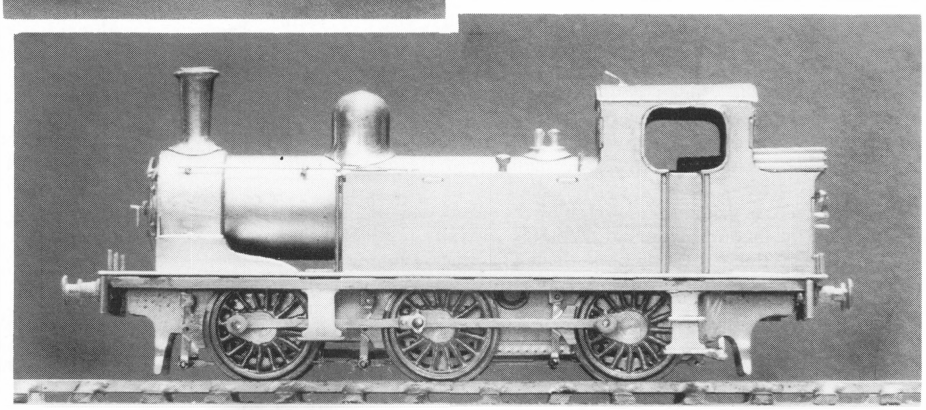


Jim McGeown at CONNOISSEUR MODELS is equally active in the same scale with his newly announced GER 10 ton ventilated van. Large numbers of these were built by the GER following a similar design which ran all over the land, lasting into BR days. Representing a 19ft over headstocks unfitted version, its main components are of slot, tab and etched grooved brass, with the remainder mostly in whitemetal. Sprung buffers and couplings plus a pre-rolled brass roof are provided. Priced at £30, the kit requires wheels, but these are also available from 33 Grampian Road, Penfields, Stourbridge, DY8 4UE (Tel: 01384 371418).



Just introduced by GOLDEN ARROW PRODUCTIONS and priced at £75, is a 7mm kit for the Southwold Railway 'Sharpie' 2–4–0T featuring etched and cast components in brass, nickel, whitemetal, resin and copper. It may be built to 21 or 16.5mm gauges, the latter's wheels plus motor pack being available separately at £25. Shortly to arrive is a ready-to-run OO gauge limited edition of 200 Class 71 Bo-Bo electric locomotives with injection-moulded superstructures on cast whitemetal underframes powered by a 5-pole motor. Featuring full glazing, roof-mounted pantograph plus interior cab detail, each will be finished in green livery as E5001, the preserved example in the NRM collection. Cost is expected to be £185 with a £50 deposit required with order. Scheduled for release in December and priced at £69 is a 4mm kit of the Isle of Wight Beyer Peacock 2–4–0 consisting of etched brass body parts and chassis, nickel rods, cast whitemetal boiler and detailing plus lost wax brass and copper boiler fittings. Sufficient parts included allow construction of any of five versions at most stages of their history from the 1860s to the 1920s. Similar tanks supplied to GWR and MR constituents may also be represented. Details of all products are to be found in the new catalogue published at £2 and available from Chris Meachen at 392 Harold Road, Hastings, Sussex, TN35 5HG (Tel/fax: 01424 445334).





Bob Jones of Fence Houses Model Foundry reckons he has come up with the very first full loco kit specifically designed and made for 2mm scale (as opposed to the etch reductions or sets of parts turned out in the past). The North Eastern E1 (BR J72) shown here has all the necessary castings, nuts and bolts, wires, etc, not to mention alternative boiler fittings to suit variants. It is designed to go with wheels, motor and gears sold by the 2mm Scale Association and costs £46 including postage. The other new product is a 2mm six-wheel Cleminson chassis to a design by Jim Watt, a very skilled and influential modeller in the 2mm firmament. As on the original, the centre W-iron is free to move sideways, held in place by tongues on the pivot arms, while the outer W-irons are pivoted longitudinally and can thus rock about the axis. Brakegear is included on the outer W-irons and the wheelbase can be varied from 8ft + 8ft to 12ft + 12ft in 6in increments, and either 3ft or 3ft 6in diameter wheels can be accommodated. Price for this nifty little device is £3.50 post free. Fence Houses Model Foundry is at 33 Ellesmere, Bournmoor, Fence Houses, Houghton-le-Spring, Tyne & Wear, DH4 6EA (0191 385 3554).

MONKS ELEIGH

MARTYN WELCH describes his new 7mm layout:

When a potential customer visited me to discuss a project he wished to undertake and then saw my half-started ScaleSeven industrial layout, he asked if I might be prepared to convert it to a rural Eastern Region BR branch set in 1952 for use at his home. Believing it would save time not having to start afresh and studiously avoiding any semblance of logical thought, I volunteered to undertake the task. Confidence oozing, I assured him that with a lot of the work already completed, it would just be a simple matter of rearranging some of the trackwork, adapting the buildings where necessary, and the layout should be completed within the year. Of course, what I *should* have done was to shelve my own model and start his project from scratch (hindsight is a wonderful thing), but blundering on regardless, I decided it would be straightforward enough and we agreed to proceed.

The genuine Monks Eleigh is a small hamlet in Suffolk and plans were submitted originally for this to have its own rail service, but, apart from allocating land to the proposed route, no further activity took place. My client felt that a model could be based upon the premise that these plans did indeed reach fruition and this seeded his idea for the layout.

I have a fair knowledge of matters Southern Railway, but when it comes to other regions I really have to study lots of books to glean accurate information. An enjoyable process if you have the time to spare, but sometimes there are aspects of a particular railway company's functions which can only be fully understood by consulting those with specialised knowledge. In this case I was happily brought into contact with two members of the Great Eastern Society – George Pring and Mike Senatore – whose superb drawings, expertise and tremendous enthusiasm have contributed immensely to the successful outcome of this project. They have advised me from the early stages concerning colour schemes, building style and design, plus typical track configurations, and ensured that the overall impression achieved is as accurate as possible. There are many others who

This was the imagined view I had in mind when planning the industrial project. The bridge is a brick-built version of the stone original which still supports the trackbed of the long-gone Yealmpton branch from Plymouth, the difference being that here an ER branch passenger train is passing over it rather than a diesel shunter plus a few wagons as originally visualised. Now faded, the originally white-painted brickwork helped motor vehicles avoid unwelcome contact with the abutments as they passed beneath the track during the war. The shop's attached shed is roofed with a single sheet of Wills 4mm corrugated asbestos which reasonably represents 7mm corrugated iron.

have also contributed their considerable knowlege. They know who they are and I shan't embarrass them by listing them all – my thanks go out to them anyway.

The model would finally rest within a building 18ft long, so the scenic boards would be confined to this length with a portable fiddle yard located outside this area, the trackwork passing through a purpose-made window, linking the main layout to its externally-positioned feed/storage board. Most of the boards were already fabricated using 4mm ply in two layers with blocks of pine sandwiched between at regular intervals, as described in the past by several modellers and generally attributed to Barry Norman. I used 4mm ply for the top deck, which is really too thin, and, when two extra boards were needed, I chose a single thickness of 6mm ply for the sides and the top as well. Given the depth of timber required because the land contours vary considerably, I lightened the load by cutting large holes at regular intervals along all sides of the boards using the same principle employed in aircraft wings. The strength is not affected, only the overall weight.

The wooden support legs are all identical, consisting of a simple shelf screwed and glued to the top of a pair of cross-braced legs in the shape of an 'H', which each have base plates or feet, allowing them to stand unsupported. The width of the shelf, which has a channel shape, is just sufficient to allow the ends of two adjacent boards to rest upon it, and it doesn't matter which support is selected for any pair. A single piece of 2 x 1 timber, with holes drilled either end, slots diagonally over protruding wooden dowels glued into one leg of two of the support units, and this bracing piece prevents the entire layout from any longitudinal swaying. The boards interlock using alignment dowels and are held together with brass clasps front and back, making for swift dismantling or setting up.

There are four boards, 3ft 6in deep by 2ft 9in wide, plus three of the same depth by 2ft 3in. Each of the boards is deeper front to back than it is wide, which may sound a little strange, but I needed to be able to manhandle the boards easily by myself, and, wishing to retain a depth of 3ft 6in, anything much wider than 2ft 9in would become too awkward for one person to carry alone. Having previously employed boards of 5ft or 6ft wide by 4ft deep on 'Hursley', working on areas toward the centre of each board had caused severe backache after short periods of activity, and I believed the new chosen sizes would minimise this problem.

Track planning for the original industrial layout had already taken this into account, so, for example, where I wished to contain a crossover on one board, the 2ft 9in width would comfortably accommodate a pair of A5 turnouts, and even these were quite gently curved for small 0–4–0 shunters. Unfortunately, the first locomotive I was commissioned to construct for use on this layout was an F6 tank locomotive having a 2–4–2 wheel arrangement, which, with the ScaleSeven clearances involved, essentially becomes almost an 0–8–0, which really should not be attempting to negotiate such sharp curvature. Suffice it to say, that my initial thoughts of 'simple adaptation' were already meeting their first stumbling blocks.

I consulted Norman Solomon, whose track-making experience is such that I felt he surely must have encountered such difficulties himself over the years, and his solution was simple – convert the A5 units into A6 versions by replacing the 1:5 vee sections on each with 1:6 ones and replacing the relevant rails around them, leaving the switch blades unmolested and the sleepers still glued in their original locations. With C&L plastic chairs on plastic sleepers, it is easy to remove any chairs which need replacing by slicing them away with a sharp curved scalpel blade. Threading new chairs onto the rails and then re-gluing back into position is quickly accomplished and a newly configured turnout results. To my delight, this proved quite straightforward and the F6 glides through the crossover with hardly a twitch. Operation of the turnouts is by Tortoise slow action motors.

I elected to use steel rail with the C&L track components, having heard Iain Rice say that track cleaning was kept to a minimum on his own 4mm projects. Also the appearance of steel is superior to the nickel silver, which has a tendency to yellow with time. People have asked if the steel rusts and I suspect this concern originates from early modelling with Hornby track, which certainly did, but that was pressed steel which is porous, whereas the C&L rails are drawn steel, which have a denser surface and seem to become cleaner the more trains travel over them – much like the real thing. The only rust I have noticed is evident where I have soldered electrical wires to the rails and not washed the flux residue away afterwards. No doubt if the trackwork was exposed to excessive water, it would tarnish with time, but my garage (which up until recently has always been quite damp) housed this model over about three years and there is no sign of rust activity.

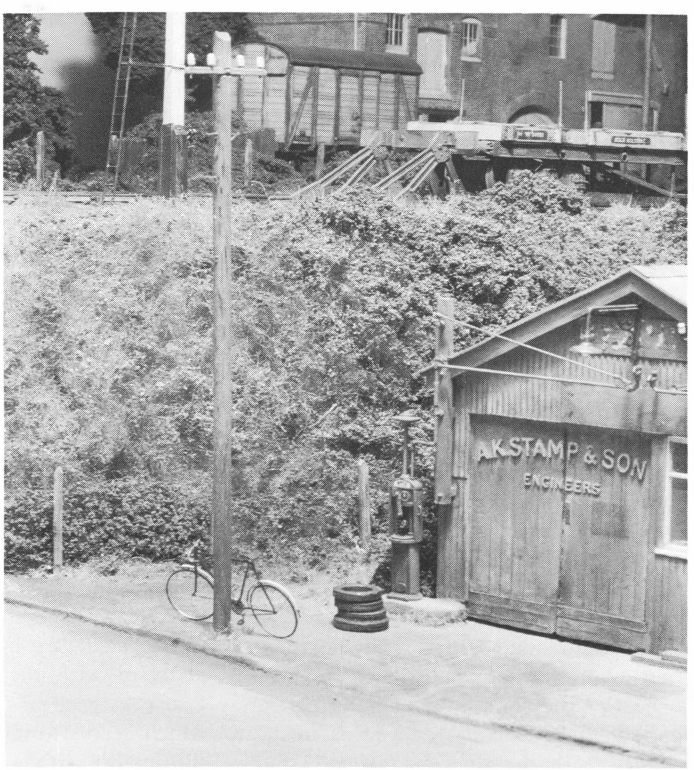
One of the great advantages of the steel is that it can simply be weathered by

The pub's balustrade is from a Scale Link etch chemically blackened, whilst the net curtains are simply toilet tissue glued to the inside of the glass.

A favourite view showing the lifted Air Ministry branch disappearing off into the undergrowth. The furthest telegraph pole is a shortened Ratio post, which, being thinner than the dowels used for the other poles, gives a false impression of distance and perspective. Trees alongside the disused track also become smaller towards the rear to add to the effect. Venetian blinds also seem to get hung up at one end and the upper shop window proudly bears a typical example. Made from microstrip and much cussing, it is the sole example to be found on the layout . . .

Signals are a combination of parts from (a) Model Signal Engineering – the cast posts on this bracket and one platform starter, all ladders, lamps and etched bracket angle, (b) Scale Signal Supply – the remainder of signal posts from tapered square section wood, cast pagoda finials plus some balance weights/levers, and (c) D & S Models for all signal arms, etched upper platforms and other small fittings. I added nickel strip to the etched brackets to create angle and Slater's microstrip for wooden slats on landings. The bracket has a disused doll with its fittings intact apart from the arm which would have directed trains up the now-lifted Ministry branch.

using my favourite Birchwood Casey Super Blue, and I found that treating the sides of the rails with the bluing liquid created a nicely rusted finish very quickly, so that little extra paintwork was needed, apart from the plastic chairs which obviously remain unaffected by the gun blue. Rinsing with water stops the chemical rusting process. Carr's weathering powders randomly stippled on to the rail sides vary the effect successfully. Painted rail sides are fine, but past experience has shown that when the rail expands and contracts according to temperature, the rail concealed by the chairs and keys usually has no paint attached, so that when it moves, tiny shiny blobs suddenly appear by each chair as the unpainted portion is exposed. The gun blue gets in behind the chairs by capillary action and the problem disappears. If you prefer to use nickel rail, gun blue will still eliminate the yellow colour, and the surface of the rail can be buffed up with a polishing mop in a Minicraft drill or similar. The



Wooden dowel telegraph poles were stained with Blackfriars Walnut wood dye, which picks out the grain nicely, requiring little extra weathering. This post and that located on the other side of the bridge, have microstrip 'ducting' attached (behind the post in this shot) to suggest the wires running down the posts and passing beneath the road under the bridge. The bicycle is a Churchward Models etched item whilst the BR rail-built buffer stop is from the excellent ABS range.

This dominating grain warehouse was based on an original from Lewes in Sussex. Some windows have microstrip bars attached, but most are scribed using an Olfa cutter and the grooves filled in with white Tippex correction fluid which dries quickly. Any surplus staining on surrounding areas can quickly be removed afterwards with a damp cotton bud. The 'James Franks' lettering was hand-painted, shaded with pencil, then severely abused to fade it. Square-section ducting originally ejected grain dust into a waiting wagon below but is now falling into disrepair and modelled from brass box-section tubing with clamps added from strip. I have a fondness for private sidings, and this example, with its embedded track and weed-strewn concrete, makes a distinct contrast with the ash-ballasted running lines in the foreground.

end result is a dark blue steel colour, although the nickel silver requires a lot more rubbing activity to make the rail react with the gun blue whereas the steel changes colour instantly.

I believe it is important to ensure there are no sudden jolts when stock passes over trackwork at baseboard joins, and, despite past attempts to solder rail ends to copper Paxolin sleepers or brass screws at these vulnerable spots, I found that atmospheric changes contrived to beat my efforts. With 'Hursley', I used rail end adjusters (MRJ No. 40, page 506) whereby the last chair preceding the joint was purely cosmetic and a 1/16in brass rod was bent over at right-angles, soldered to the base of the rail end, and the vertical length passed through a hole drilled through the sleeper and baseboard. This rod was threaded 10BA at the bottom so that a nut/washer could be tightened up beneath the board, which effectively pulled the rail end downwards until it aligned with the adjacent rail end. If the rail on the next board was set too high, this one would be adjusted downward instead, so there was no need for any upward adjustment. The only weak spot was found after some time when the pressure on the soldered joint might cause a fracture and the rail would spring upwards again. On the new project, I drilled holes through the web of the rail and passed the brass rod through this from the side away from the viewing eye before soldering it in place, using a burr in the Minicraft drill to eliminate the protruding spigot on the opposite face of the rail. In order to complete the disguise, half a plastic chair is glued to the sleeper on the viewing side and only the closest inspection will expose the ruse.

With the track laid, it was time for the electrical connections and, as mentioned in the past, my brain really does have a problem with the fizz-bang department. I suspect each of us has a subject matter which seems totally alien no matter how thoroughly it is researched, and my Achilles heel is wiring. I have purchased books showing the most demented idiot how easy it is to wire up a model railway but, despite their best attempts, the information passes through my mind with apparently little to stop it on its journey. I attempted my own wiring diagram after further frustrating study of the literature and finally submitted the offending piece to my good friend Peter Squibb, who (I suspect, after much giggling) returned it to me with his own far simpler version attached. Between other tasks, I took a week creating my diagram whereas his was produced during a short train journey to his place of work – which just about sums up the situation. I followed his plan and, when all was finally connected, everything worked first time.

After consultation with my 'technical advisers', the consensus of opinion was that the architectural design of the railway buildings would have been similar to other such lines in the area, and since most of these were of the '1865' style,

A typical gate from Phoenix Scale Miniatures has functional hinges added so that it can be displayed open or closed. The loading gauge was scratchbuilt using bullhead rail, brass square section rod and added cosmetic bolts from the Grandt Line range. Foreground fence posts are Evergreen square-section plastic.

All whitemetal ground signal kits came from an occasionally available assortment by Andy Beaton. Lamp casings were drilled and wire spigots inserted so that they can revolve through ninety degrees. This wire passes through the support stem (also drilled through) and the baseboard, ending in a 'J' shape below. Each is hand-operated by rods from the baseboard front edge. Brass tube is soldered to the rod ends, drilled through, and slots over the tail of the 'J' – very basic but it works. The partially dismantled yard crane (Mike's Models) sits on a circular brick base with Howard Scenics brick sheet wrapped around Plastikard disc formers to maintain its shape. The card brick sheet is more supple than Plastikard for this task. Richard de Camin kindly sent a surplus resin cast GN wagon body for use as the station lock-up – a distinctive feature of Great Eastern stations and frequently mistaken for a simple store. If a purpose-built brick item wasn't constructed, an old van body did the trick. The water trough is a little cast metal gem from Duncan Models.

which was of a quite distinctive construction, I decided to follow this as closely as possible for Monks Eleigh. George provided his own superb drawings of Cockfield station and this single-storey building has, like all of my models, been created in Plastikard. Fortunately, Slater's introduced their English Bond brickwork sheets just as work was about to commence, which helped with platform construction and other areas where this pattern of brick was necessary. On many prototype structures, four courses of bricks measure 13in as opposed to the 12in so often expected by modellers, and a certain amount of brick counting took place with a magnifying glass studying the vast array of photographs provided by George and my customer in order to establish building dimensions where no drawings were available. Since I use Slater's brick Plastikard, which is based upon the more regular size brick, this complicated matters somewhat, having to compromise on corner quoin dimensions in order for the overall result to appear correct. The protruding corner sections have five rather than the four brick courses of the prototype in order for the undersize brickwork to align with windows, etc. Had I been using scribed modelling clay for the brickwork, no compromise would have been necessary, but I have always used Plastikard and prefer to stay with materials with which I am familiar.

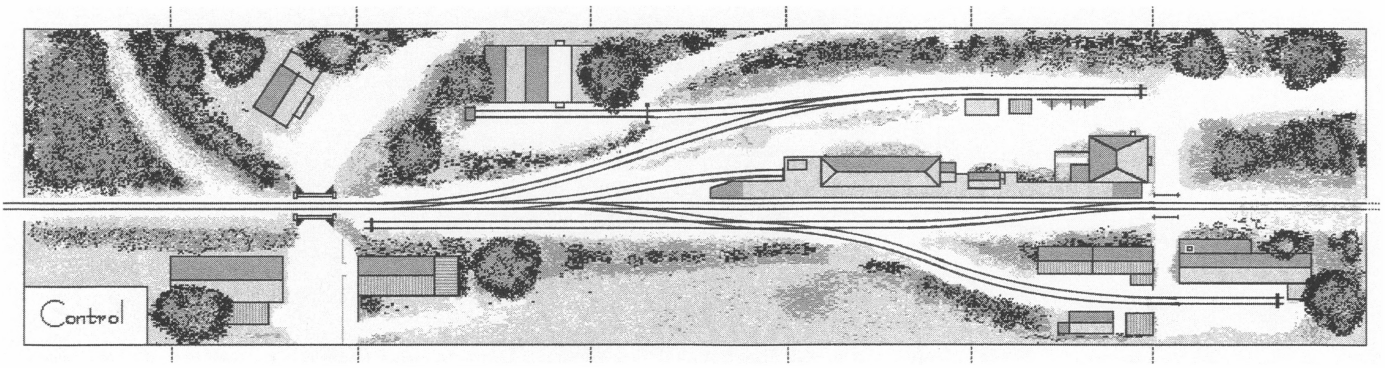
The station master's house is based upon the crossing keeper's cottage which existed at Glemsford. These cottages were smaller versions of standard 1865 station masters' houses, and at first I thought the building looked undersize until I was told by George and Mike that this is exactly what these cottages were. Their windows, ceiling heights, etc, were scaled down versions of their larger counterparts, and my concern that I had constructed this building to the wrong scale was unfounded.

The signal cabin is a shortened version of that at Glemsford and has full interior fittings utilising the Springside signal box detailing kit. Whilst this pack of castings is essentially GWR in style, the view of the interior is sufficiently limited for this not to be evident. I had a few problems with the glazing bars because I was using Cobex clear plastic for the windows and attempting to attach the microstrip beading to it using Plastic Weld liquid cement. I thought a good bond had been made, but after a couple of days the glazing bars began to ping away from the Cobex as soon as they were touched, and I had to remove all of the windows in order to start again. Sometimes I hate this hobby! Having always admired Gordon Gravett's architectural skills, I sought his advice and he suggested I try perspex because he had found it ideal and sent me some to try. This time everything adhered successfully and any staining caused by the liquid cement can easily be polished from the perspex using meths, Brasso or

Plastic Polish, a product mentioned in one of Bob Barlow's editorials and which is used extensively by the model aircraft fraternity for cleaning cockpit canopies, etc.

Being set in 1952, there was some lengthy discussion concerning the colour scheme to be chosen for the railway buildings. Most models I have seen based upon the Great Eastern region have been in green and cream and it was George who advised me that despite nationalisation, the ex-LNER brown and buff livery was still much in evidence and it was some time before the more outlying areas received their new green and cream paintwork – usually just before closure! I thought these colours would benefit from a bit of weathering whereas the green and cream paint would probably have only been recently applied, and, to me, shiny paintwork looks less impressive on models than in reality. George thought my decision was 'a brave one', which worried me somewhat, but he went on to say that with everyone expecting the later livery, it would be interesting to gauge their response to my version. This didn't quite alleviate my fears, but I feel that the brown and buff colours lend a more dilapidated postwar feel to the model, which was my intention.

The remainder of the buildings are based upon assorted prototypes from various parts of the country, which I believed would fit in with the Suffolk



Platforms crossing baseboard joints are always a headache and each section's end wall has brass dowels glued into it which slot into short tubes set in the neighbouring section to encourage correct alignment. Thin slivers of foam are glued to one end wall so that they squidge up into the gap when the boards are forced together, and with the top edge of the foam painted tarmac colour and the front strip brick colour, the disguised joint is discreet.

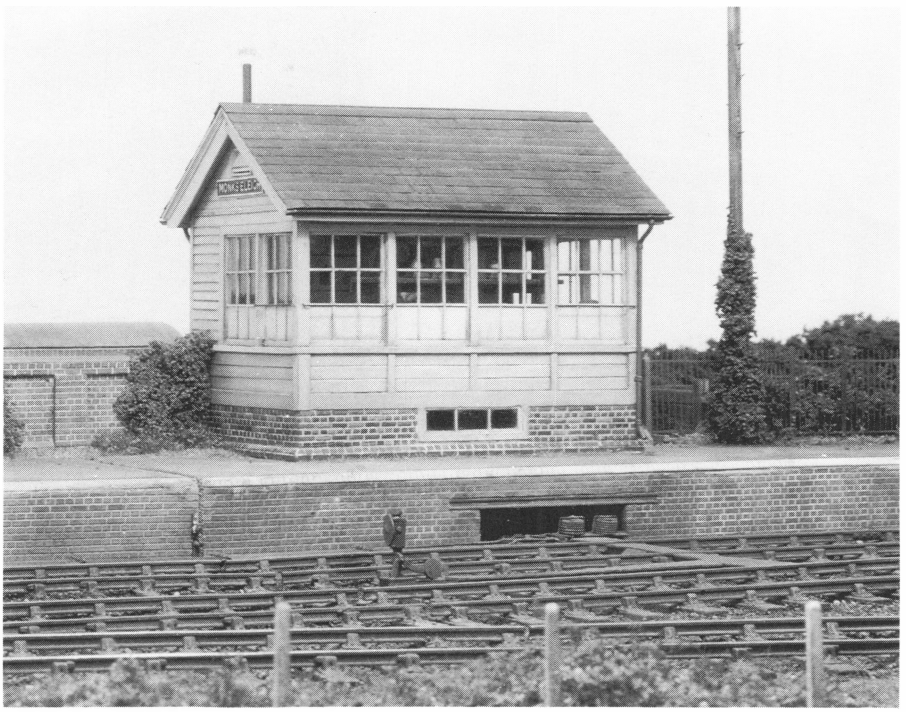
The entire centre section of the station building front is thick perspex with window frames, door panels and brickwork bonded to it. The lower vertical door panels are actually scribed into the perspex and painted afterwards. Signal wire pulleys are lost wax brass from MSE, who also supplied all whitemetal point rodding stools. The rods are steel wire from K & S Metal Centres found in most model shops and are all loose fitting to allow for expansion and contraction. Compensators, angle cranks, etc, were scratchbuilt from brass.

'Gage' is a common name in Monks Eleigh – hence its selection for the coal yard. The Parkside wagon body makes a useful store, with the bins made from C & L sleepers. Platform railings from Cove Models are etched brass with 4mm bullhead rail lending added vertical supports. Grass protruding from cracks in the tarmac suggest this may be the less well-trod part of the platform.

setting, and were partly intended for my previously proposed industrial layout. The garage, which was featured on the front cover of MRJ No. 95, was based on that at Newport, near Saffron Walden, the large grain warehouse comes from Lewes in Sussex, the pub from Chandlers Ford in Hampshire, whilst others are copies of Isle of Wight buildings, and so on — a truly varied assortment but which blend together well.

One of the bonuses of working in ScaleSeven is that trackwork looks far more authentic with its finer checkrail clearances, whereas finescale track needs to accommodate larger flanges and the gap is so noticeably oversize. Although the embedded rails on this project needed no actual checkrails as such, the groove carved into the plaster infills needed to be very fine and was simply achieved after it had set by dragging the tip of a centre punch along the plaster using the inside edge of the running rail as a ruler. I am told by a colleague who worked once with a crew laying concrete with track embedded in it, that they simply pushed an empty mineral wagon over the newly laid material so that the wheel flanges grooved the wet concrete, creating their own clearances. Seems perfectly logical when you think about it and this could be a simple way of achieving the desired result in model form.

I painted the plaster using enamels to get the basic colour right, after which the surface was coated with diluted PVA glue and finely sieved fire ash sprinkled over it. This material comes from a friend's fireplace and is ideal in its texture and colouring to represent concrete. By coating in approximately square patches, then repeating the procedure on adjacent areas after the initial ones had set, the overall effect is that of concrete or cement surfaces which are laid in panels. Finally, thin lines of glue are applied to the 'joints' of these panels and Heki



A timber walkway crosses the track, enabling the signalman easy access to the gate which once protected the private siding in the foreground. The gate now rests broken amongst the undergrowth as evidence of some past misjudgement during a shunting movement. The short section of brick walling slots over the baseboard join, minimising distraction to the casual observer. Slater's concrete posts mix happily with the ER timber variety.

Viewed from the rear, this side of the model is rarely seen, although, if exhibited, it will probably be shown 'in the round', enabling all views to be enjoyed. The ex-PO wagon bears scant signs of its original bright yellow livery. All buildings are mounted on ply bases cut out from their surrounds and thus removable for transport. Jigsaw fashion, they simply plug into their recesses and are useful ploys for disguising board joins.

The small rear garden of the station master's house is fully detailed, although mostly obscured by its ornate surrounding wall. Curtains for this structure arrived courtesy of Carl Legg who computer-generates them as coach seat covers. The flint/rubble wall on the rear of the storage hut is also typical of the Suffolk area modelled despite its prototype being located well to the south at Ventnor on the Isle of Wight. Rough goods yard groundwork is finely sieved soil sprinkled onto a coating of PVA. Natural soil colour leaves minimal staining effects to be added.

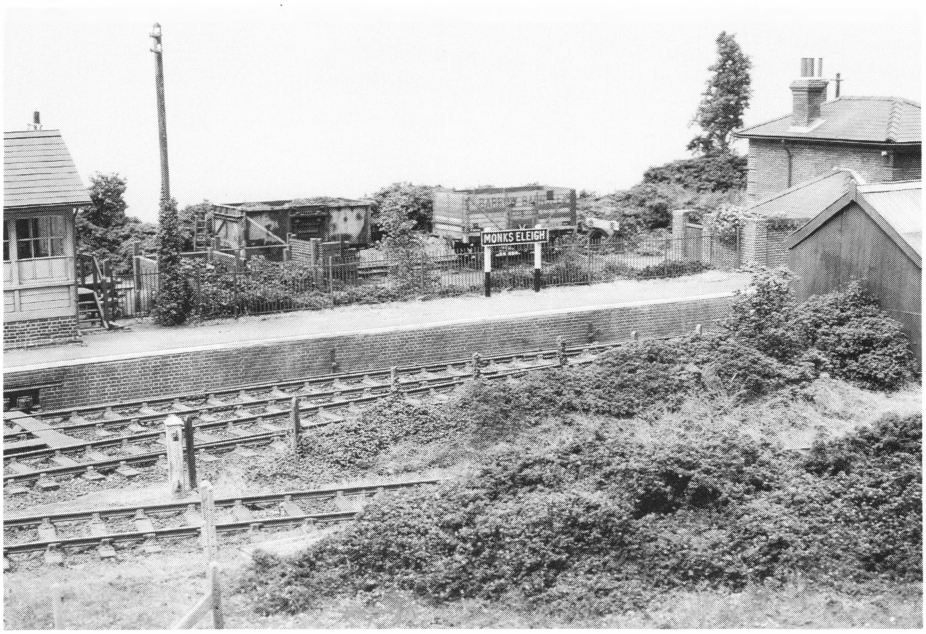
nylon grass fibres are puffed onto this, representing the verdant growth springing up between the cracks. Rough road surfaces are created in a similar manner.

Originally, one of the sidings was going to be set in cobbles or stone blocks, but using the Wills range proved difficult, particularly where the track curved. I reverted to the modelling plaster and tried carving individual cobbles, but this seemed a mind-numbing task and I changed tactics by carving in sleepers laid longitudinally. I had tried using proper sleepers, but they always looked unnatural whereas the carved plaster enabled me to manufacture well-worn and, in some places, rotten sleepers quite speedily. More grass sprouting from between the timbers completed the illusion.

Scenics were achieved utilising methods I have described in past issues and, with a couple of exceptions, there is nothing new to report here. I have previously stated that carpet underlay failed to impress me with its inability to look remotely like embankment grasses, brambles, etc, but I thought I might just give it another go simply because a friend turned up one day with a roll of the stuff and suggested I experiment with it should I find the time. I thanked him and plonked the bag of material in a corner, trying my best to ignore it, but, after a few days, reluctantly decided to give it some attention instead.

Raised groundwork and embankments are made using polystyrene insulation sheets, cut and scraped with a knife edge to shape, and glued together in layers before covering with plaster bandage. The latter is probably not necessary with hindsight, as the foam is easily textured and remains stable when scenic material is applied afterwards. Use special foam adhesives to bond the layers together or PVA, otherwise the foam will melt and give off nasty fumes. One advantage of the plaster bandage is that spray carpet adhesive can be used to apply the scenic grass work without worries of melting the foam, although carpet adhesive is designed for foam-backed carpet and is less volatile.

I sprayed the bare embankment with the carpet adhesive, followed by a rough application of Heki fibres all over, just to give the ensuing underlay a key for better adhesion. After a further application of glue, I pressed some of the underlay into position and when the glue had hardened off (a matter of minutes), gently pulled tufts of underlay away from the surface until a ragged brown patch resulted. The removed tufts can be used again later on freshly glued patches and the result is a densely covered embankment. I purchased an aerosol can of acrylic paint in the local car accessory shop (cellulose is no longer available), choosing British Racing Green,



The foreground private siding passes between an assortment of huts and a bicycle shed before crossing an access road ending by the small factory.

Flint/rubble walling is achieved with cork granules pressed into a PVA base and when all is set, the face of each cork nodule is filed flat, then painted to simulate the flint stones. There must be an easier way of doing this! The platform starter towers above the buildings as it also protects the level crossing, which needs to be visible from some distance off.

Plaster scribed to represent old sleepers adds a new texture to the embedded trackwork, contrasting with the rough road either side. The factory building marks the end of the layout concealed behind and is based upon a boat yard structure near Bembridge, Isle of Wight. It is now an engineering shop and nobody could explain the original purpose of the holes surrounded by cement beneath the lower windows.

although any dark rich shade of green will suffice, and once happy that the majority of tufts were roughly pointing skywards, I sprayed the whole embankment.

After this was dry, I coated the 'foliage' with acrylic spray varnish and sprinkled on assorted scatter foams and smaller particles of varying colours, which resulted in a tangled mass of impressive undergrowth all over the embankment. Further applications of differing textures and colours were later applied to vary the effect, and I must say the overall result is rather pleasing. I still use fur fabric to embellish the areas with long grass where necessary, but the underlay method is certainly less time-consuming. In the smaller scales, the underlay appears far too coarse and perhaps this is why I have previously looked upon it unfavourably, having seen some really over-scale undergrowth on a couple of 4mm layouts, although I readily admit this was the perfect example of 'I haven't tried it because I don't like it' – one of my less endearing traits.

Most of the trees are based upon the plastic variety of kit supplied by Green Scene, with their superb Flexi-bark attached to the trunks to give authentic texture. This is a quick-drying flexible artex-type mixture which covers rough joints and enables various bark effects to be created quite easily. When painted, the trunks and branches look far less like the plastic materials they actually are. Other trees were a bit of an experiment, which brings me to the second item differing from my normal methods of construction. Paul Fletcher (one of our local railway group members) had tried, rather successfully, using hawthorn sprigs as the basis for some of his trees, and he and I went foraging across Dartmoor in the springtime searching out some suitable examples which I could play with. Now I'm not too sure whether or not one is supposed to chop off chunks of these without permission – although they grow in their thousands in this area, and my meagre selection would hardly cause a crisis in the May-tree world. The problem with these natural products is their tendency to become brittle after a time; Paul uses Shellac to maintain some suppleness on his, and perhaps glycerine might do the trick just as well if applied shortly after cutting.

I use rubberised horse-hair for the main clumps of foliage, sprayed with black acrylic paint, followed by carpet foam underlay adhesive, then coated with assorted foam particles from the BTA and Green Scene range of products. When the hawthorn branches are sprayed with carpet adhesive and the clumps applied, they hold the individual twigs of the hawthorn together, and I hope they will be less liable to breaking as a result. Only time and frequent handling will tell. All of the larger trees are removable, having holes drilled in their bases and brass rods inserted. Tubes of brass are set in to the ground materials and the trees simply slot into these.

Telegraph poles were a bit of a challenge since the Ratio 7mm versions are, to my eyes, a little on the thin side,

The level crossing gates are whitemetal items from the MSE stable, modified to suit the region, with added hinge or sliding bolt detail and posts from Evergreen square-section plastic plus extra thickening layers of Plastikard. Acme Models supplied gate mesh which, sprayed black/brown, suggests its need for long overdue painting.

and instead I chose wooden dowelling from the local model shop. Although not tapered, this does not notice to the casual observer, and I used the Ratio cross-beams which seemed to be accurate. They have nice bolt detail moulded on, which saves a lot of fiddling with cosmetic additions. The pots required drilling in order to fit on the plastic spigots and the latter proved too fragile for the task. I found these broke off very easily when handling the poles and replaced them all with .5mm brass rod items instead. The Ratio moulded steps are attractive but possibly slightly oversize, and initially I cut these from the plastic poles with a scalpel and glued them to the dowels. However, they again were too fragile for my clumsy pinkies, and rescue came in the form of a visit to our home by Gordon and Maggie Gravett. I was showing Gordon the problem, when he announced he had etched his own pole steps some while ago and would send some for me to play with after he got home. A packet of several million duly arrived and I used these very neat items instead of the plastic ones, chemically bluing them rather than risk clogging the detail with paint.

The F6 locomotive started life as an F5 kit from the Connoisseur range, using the chassis as the basis, with the main body parts fabricated from nickel silver sheet. Dome and chimney are common to both types and are whitemetal components from the kit. I made individual side tanks with the inside faces modelled, as they could be seen when viewed from above, and it was shortly after completing these that a previously elusive prototype photograph of the tops of the tanks emerged showing that a special cover plate was bolted over the gap between tank top and boiler to prevent feet and equipment falling between tank and boiler. With these plates soldered in place, it is no longer possible to see that the tanks do have inside faces, so I needn't have bothered building them in their entirety.

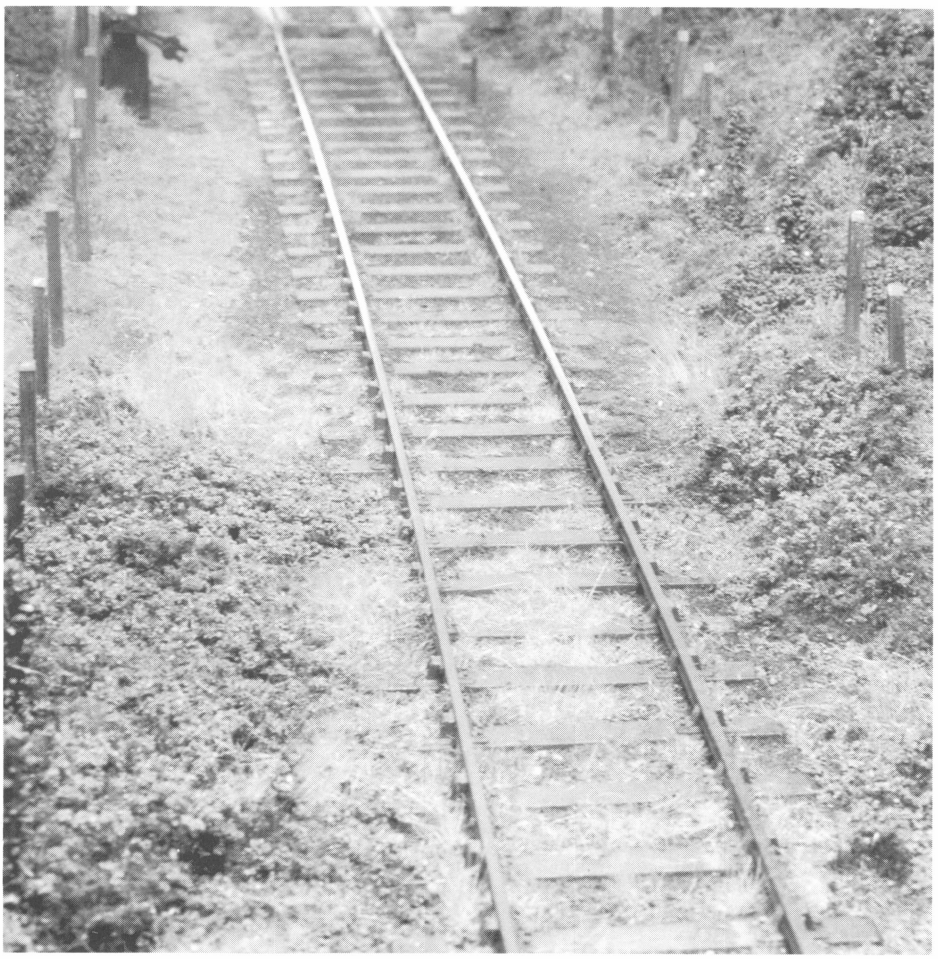
The kit frames come with finescale spacers and I should have replaced these with my own fabricated S7 spacers, but, thinking I would not be able to cut these perfectly square, I chose instead to use the spacers supplied in the kit and make cosmetic frames from black Plastikard glued to the outer faces of the nickel items. I traced around the metal frames with a scriber onto the Plastikard and trimmed these so that they were identical. When glued to the etched nickel items, the illusion is that of correctly spaced frames. This may sound daft and unnecessarily complicated, but it was quite quick and it seemed a good idea at the time. There was some logic behind my thinking in that the pony and bogie wheels would most likely touch the frames when negotiating the sharper curves and I thought this cunning scheme would eliminate any possibility of shorting. As it turns out, the plan has worked, because the wheels do touch the frames at certain spots and no shorting occurs. Where they

It is proposed that a future short extension to Monks Eleigh may give access to a military storage depot, and this would involve the occasional delivery of a few wagons to its holding siding for collection by a small diesel shunter. For the time being, the spur beyond the crossing is purely used as a run-round headshunt, the trackwork beyond rarely used and slowly disappearing under a carpet of brambles, ivy and long grass.

rub, any paint removed only exposes black Plastikard which doesn't show, being lost in the gloom. Power comes from an RG7 motor.

The one coach which appears in the photographs is the D&S item I described in an earlier article (MRJ No. 90) whilst the wagons are mostly those which appeared in my weathering book plus some later additions in similar vein. Other coaches and locomotives will follow which may be described in future articles, space permitting.

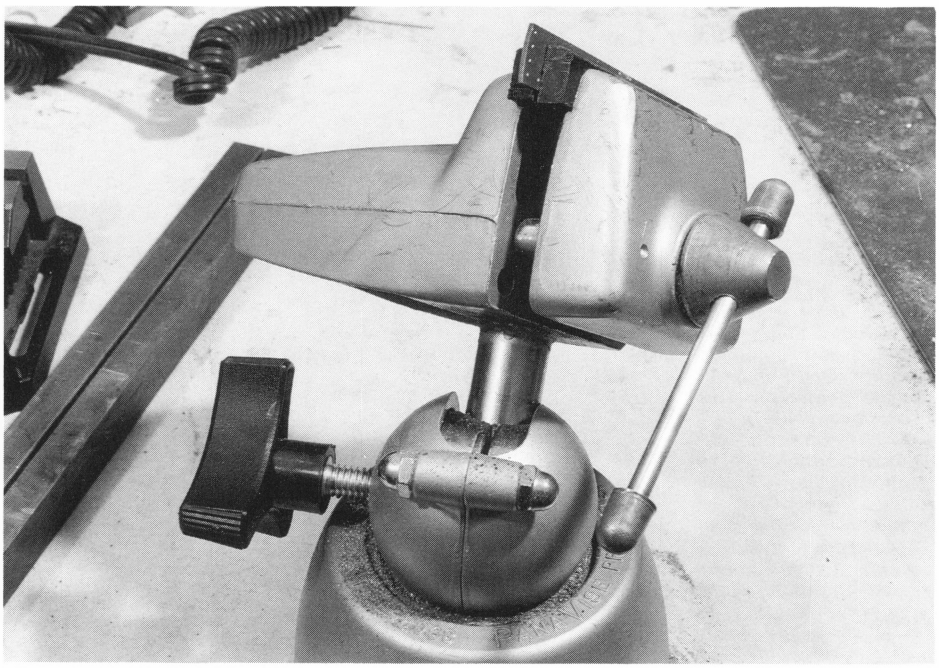
Overall, I am pleased with the end result, particularly as the whole project was started and partly constructed with a totally different layout in mind. I have learned not to make such an illogical decision in the future and my next layout will certainly be better planned in its initial stages – if I ever construct another. This past few years has been testing, to say the least, while Monks Eleigh has been developing, and I have no immediate plans to commence another project. Of course, the industrial scene does have a certain appeal, which I sort of started before, and then there's that Isle of Wight layout I was considering – mind you, the London Underground has fascinated me since childhood visits to relatives, and there's always the . . .



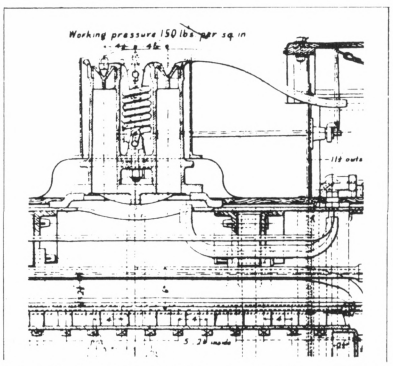
VICES

by LAURIE GRIFFIN

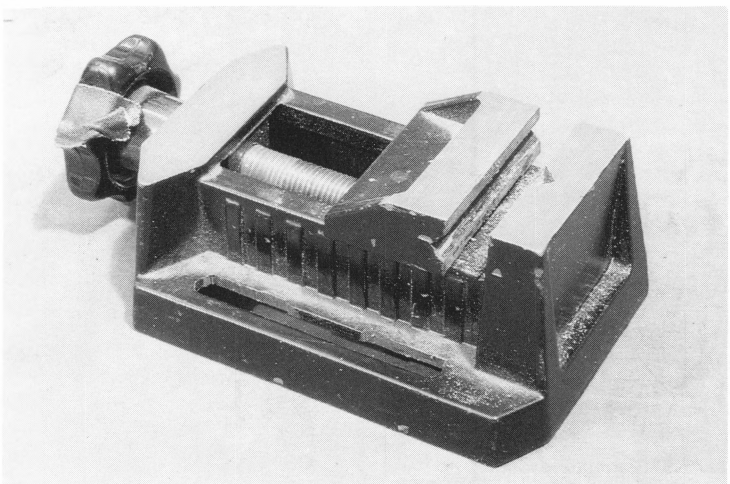
No, not what you're thinking! This is about different ways of holding or clamping components when we are shaping or joining them.

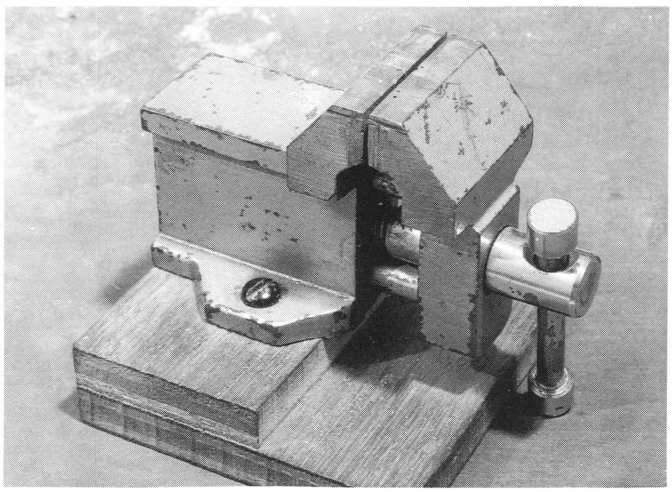


This is the vice I use at the bench for all my general work and metal holding. It was purchased from Shestos and I find it copes with perhaps 95% of what I need to do. These vices are made in the USA by Panavice, who produce a number of 'mix-and-match' components to enable you to make up the kind of vice you require. There are short and tall swivel bases, bases that mount on a vacuum sucker, various jaws and jaw sizes, as well as special jaws for specialised applications. What I have is the standard vice head with a universal swivelling base. The main components are castings in non-ferrous alloy with the tommy bar, guide bars and screw in plated steel. The jaws, made of a firm black plastic material, are approximately 50mm long and will open to about 38mm. When I first bought this vice, these were the parts I was dubious about, and I contemplated replacing them with a set of copper jaws which Panavice do as an accessory. However, I've found them to work extremely well and after nearly two years are just getting to the stage where they will need replacing – and even then it is only because they are wearing down on the top edges; the clamping surface inside is still good. Remember, I use this vice every day, so for hobby use you can probably extend two years by a long time. I also find that the plastic has a slight give and will not damage delicate detail, rivets or bolts on a casting that might otherwise get squashed in metal jaws. I like the way that the base allows you to swivel and tilt the jaws to any angle. This is useful as it allows me to turn the piece being worked to the most convenient angle rather than having to twist myself all over the place.



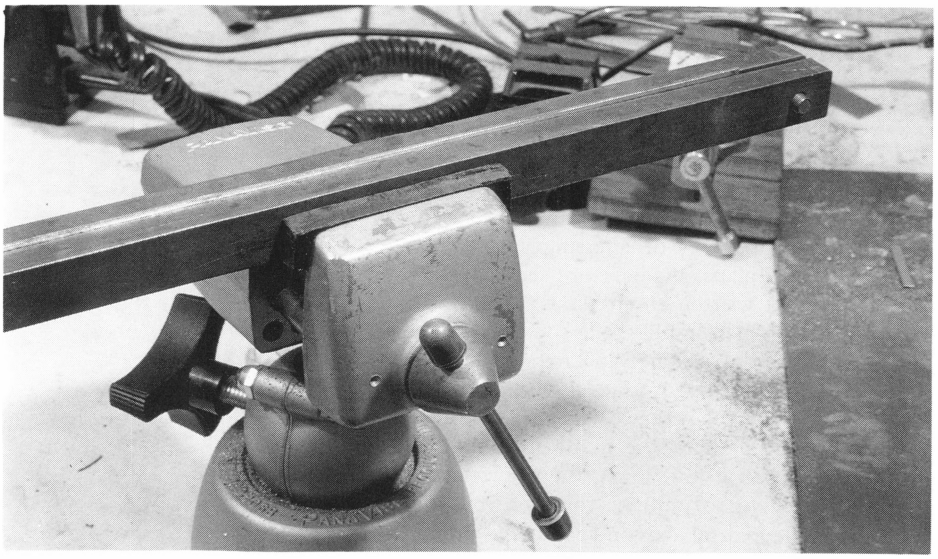
WORKSHOP MATTERS

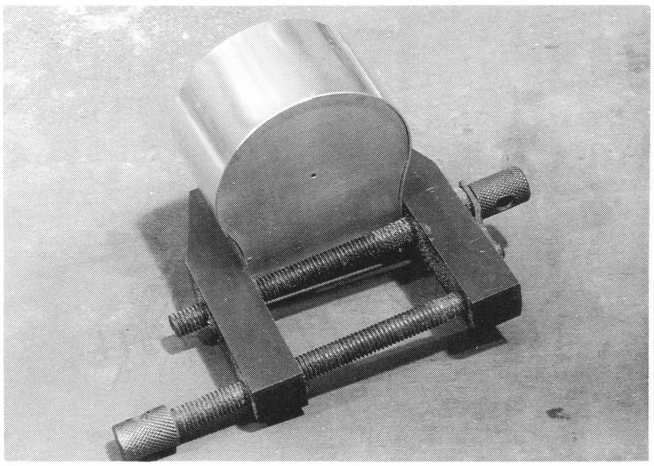


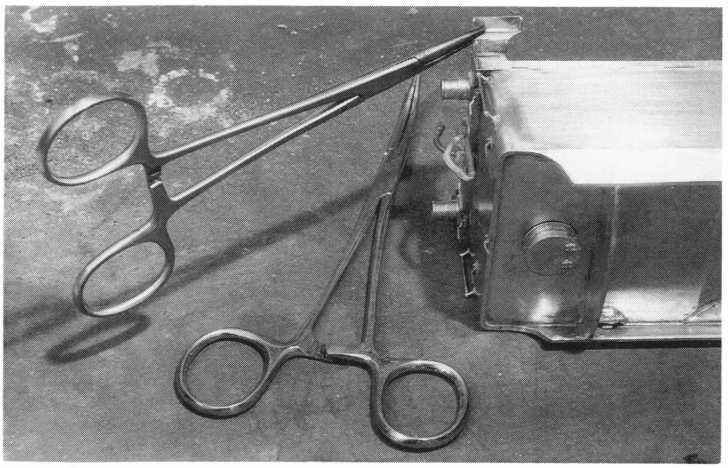


Left: I sometimes find this little machine vice useful. It comes from the Minicraft range and is sold as an accessory to their range of miniature power tools, widely available retail. I use this when drilling small bits of metal with my pillar drill. It's *much* safer than trying to hold work in your fingers. It is also useful for holding small pieces of metal when marking out – because it is small and low, it allows you to steady your hands on the benchtop as you position the scriber or rule, reducing the handshake problem. Notice also the vee-slots in the faces of the jaws, one horizontal and one vertical – these help tremendously when holding round-section metal, preventing slip or twist. *Right:* This is a cheapo. Several tool merchants – Modelex, Proops or Squires – all sell vices like these for under £5.00. I have mounted mine on a small square of 9mm ply to make a useful little holding device. Sometimes, when working on a small component, say with needle files, it can constantly be turned back and forth to get at and look at different sides to check shape or size. With delicate work, this can be a better solution than the swivelling vice where I would have to stop, undo and retighten before continuing.

A vice is fine when working on components up to the length of its jaws, but when building models we sometimes have long, thin pieces of metal, like footplate valances, which need filing to shape or cleaning up. Whilst it is perfectly possible to do this using a vice on its own, I am never happy about the process. It is all too easy to catch, buckle or bend the metal, and, if the entire length needs filing, you can only work on the part of it that is in the vice, making it too easy to file an uneven edge. The solution is to use a pair of clamping or folding bars. Mine are home-made from two lengths of bright mild steel, 6mm by 4mm section and about 300mm long, held together with an M6 screw at each end. The screws can be tightened to clamp metal strips and can be adjusted to suit the thickness of the metal being worked on. I then clamp the lot in the vice to enable me to file the whole length in one go. I made these several years ago; in fact, I made three sets of different sizes. It is possible to buy these from some specialist tool suppliers, but try making your own from bar or from the metal angle that B&Q DIY stores stock these days.

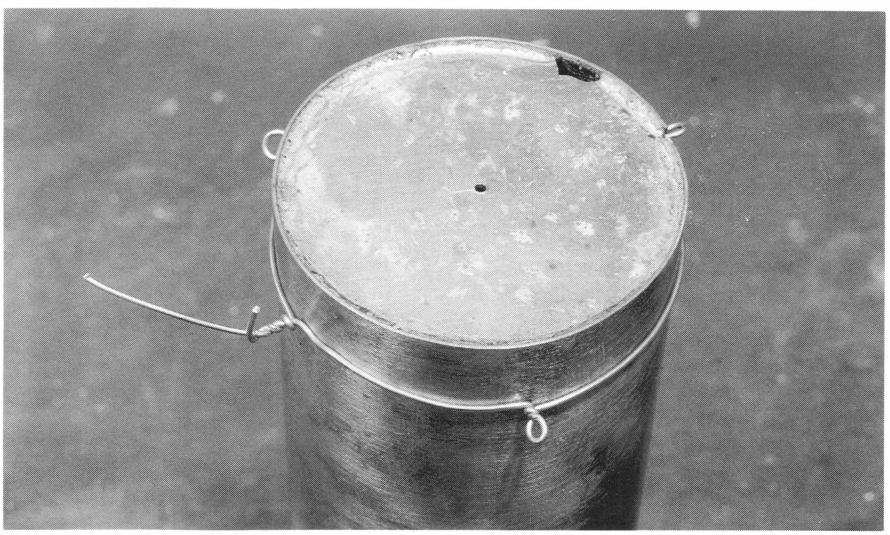






Left: Toolmaker's clamps are easily obtained from suppliers like Modelex, Squires, Shestos or Proops, and again come in useful for clamping all sorts of odd bits in a variety of situations. I am using a pair to hold a smokebox wrapper around the smokebox formers ready for soldering together. Toolmaker's clamps come in various sizes – these are 2in (they open to this size) and work by the two screw threads working in opposition to provide a wedge action on the jaws, resulting in a high clamping force. They also come in useful for clamping flat pieces of metal to things like the drilling machine table where they will not fit into a vice. *Right:* Surgical clamps or artery clamps can come in handy. Here I am holding a footstep in place ready for soldering. Without clamping them in place, it's funny how these small components will remain in place until you have just picked up the soldering iron, or just as the solder is about to set! These clamps give you an extra pair of heatproof fingers to stop this happening and I find they save me a great deal of aggravation. You can also use them to clamp parts together while adhesives are setting. These tools are available at exhibitions from several of the tool suppliers and often can be found on surplus tool stalls in markets. One or two pairs will only cost a few pounds and will be a useful addition to your toolkit.

Another useful clamping device which I use when soldering boilers is this – a simple piece of wire! Cut a length somewhat longer than needed to pass round the diameter and twist two or three loops in its length, roughly equal distance apart. Twist the ends together, then wind tight the loops and twisted ends with pliers. You can exert considerable force in this way to make sure that joints are closed up for soldering. Remember that twisting hardens the wire, so spread the tightening between all the loops or Murphy's Law will apply and the wire will break just as you think it is tight enough! Any soft wire will do this job – copper electrical wire with the insulation stripped off is useful but has the disadvantage of being easily soldered onto your work. Best of all is soft iron wire, which can be obtained in long coils from good tool shops and model engineering suppliers. Flower shops and craft shops also sell it in shorter, straight lengths for floral arrangements. Being iron, it does not take solder so easily.



Junctions on the ESSEX BORDER

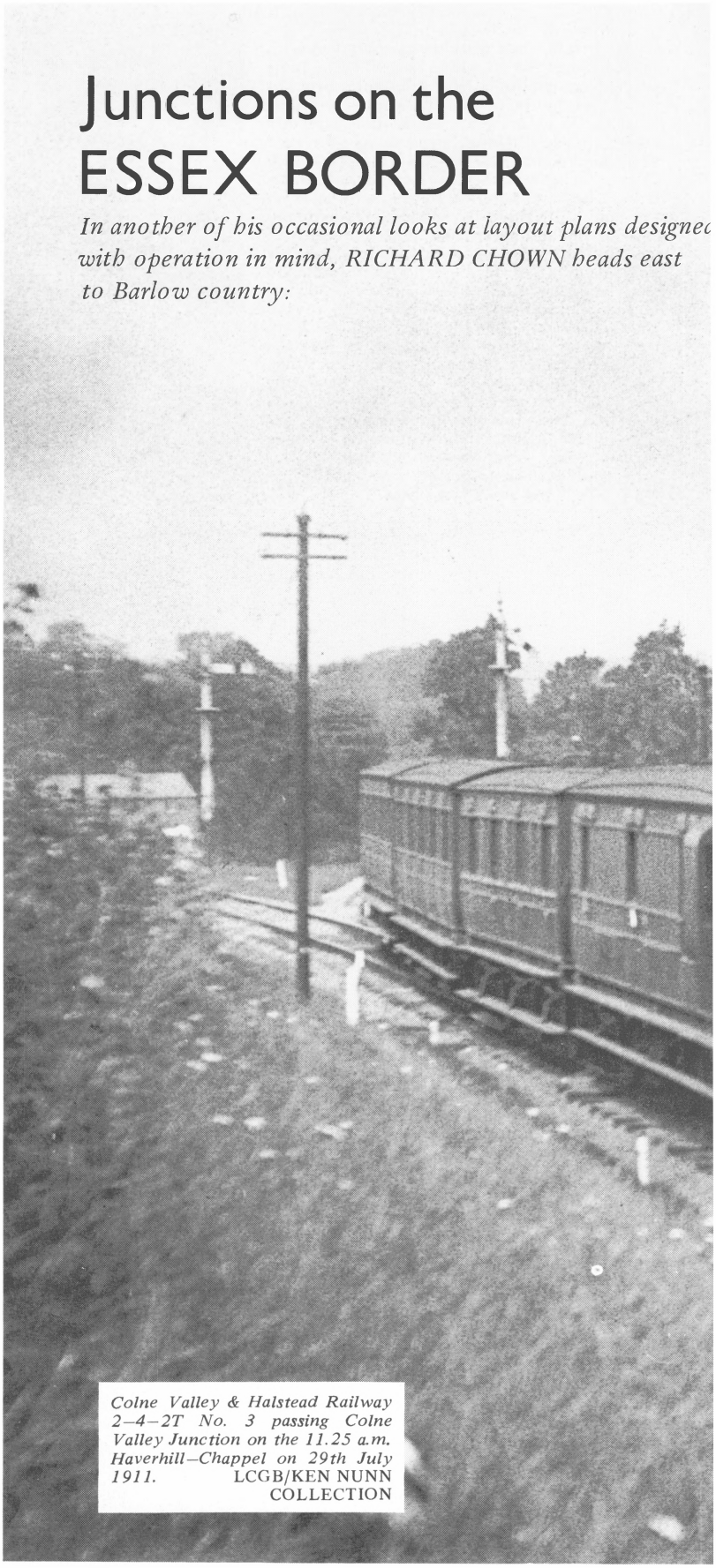
In another of his occasional looks at layout plans designed with operation in mind, RICHARD CHOWN heads east to Barlow country:

Looking for interesting operation closer to London, I found that I was trespassing on the former editor's doorstep – as the bridge at Haverhill North Station goes over Wratting Road. My reason for this choice is the interchange of traffic between the Great Eastern Railway and the Colne Valley & Halstead. I have had to do a fair bit of guessing about this from the plans, as I have not seen the one book yet written about the CV&H. If, as Cecil J. Allen implies, the southern limit of CV&H working was Chappel, it was not well-equipped to deal with it. The construction by the CV&H of the link at Haverhill, and the number of sidings for exchange traffic at the GE station there, seem to indicate that traffic with Cambridge and beyond was the more important.

The layout is designed for P4 with a minimum radius of 1 metre. For once the topography does not collude in making it an exhibition layout – it could perfectly well be a private layout in a loft, in which case the scenic backdrops on the outside are straightforward. Set-up for exhibition backdrops can only be fitted on the Chappel and Glemsford operating wells. To make the layout self-contained, I have invented a loco shed and turntable in a logical place at Haverhill North. Apart from that, everything else is compressed but is in accordance with the map, i.e. crowds of scissors, diamonds, tandem turnouts and slips in the GER way.

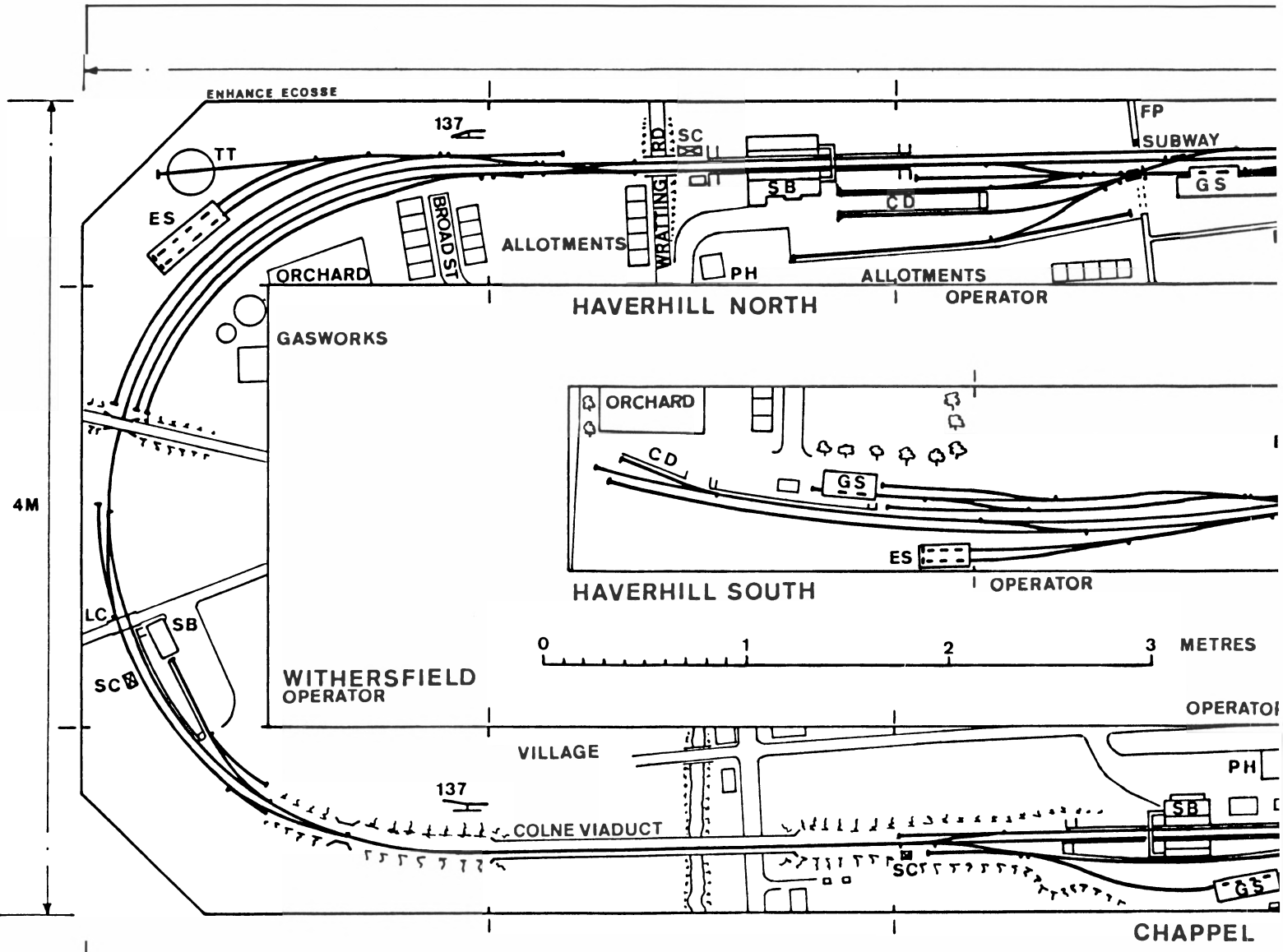
Whereas on the prototype, GER services worked through from Cambridge, Long Melford and Marks Tey, on the layout Haverhill North is effectively its own fiddle yard stabling at least two passenger trains and two goods trains and their locomotives. The CV&H, however, stables its stock at Haverhill South and shuttles it to North as needed. It needs at least one passenger and one goods train and their locos. When exchanging goods at North, the swap could be for, say, half of one of the GE trains. The plan of Haverhill South changed significantly between 1895 and 1904 – I have shown the former plan with the brickworks siding added from the latter. At that date there were several small brickyards in among the houses of Haverhill.

Colne Valley Junction is of great interest. As a junction built in 1863, it predated the BoT requirement for double line at junctions but it did have to have signalling. The original signals probably



Colne Valley & Halstead Railway 2–4–2T No. 3 passing Colne Valley Junction on the 11.25 a.m. Haverhill–Chappel on 29th July 1911. LCGB/KEN NUNN COLLECTION


No 3

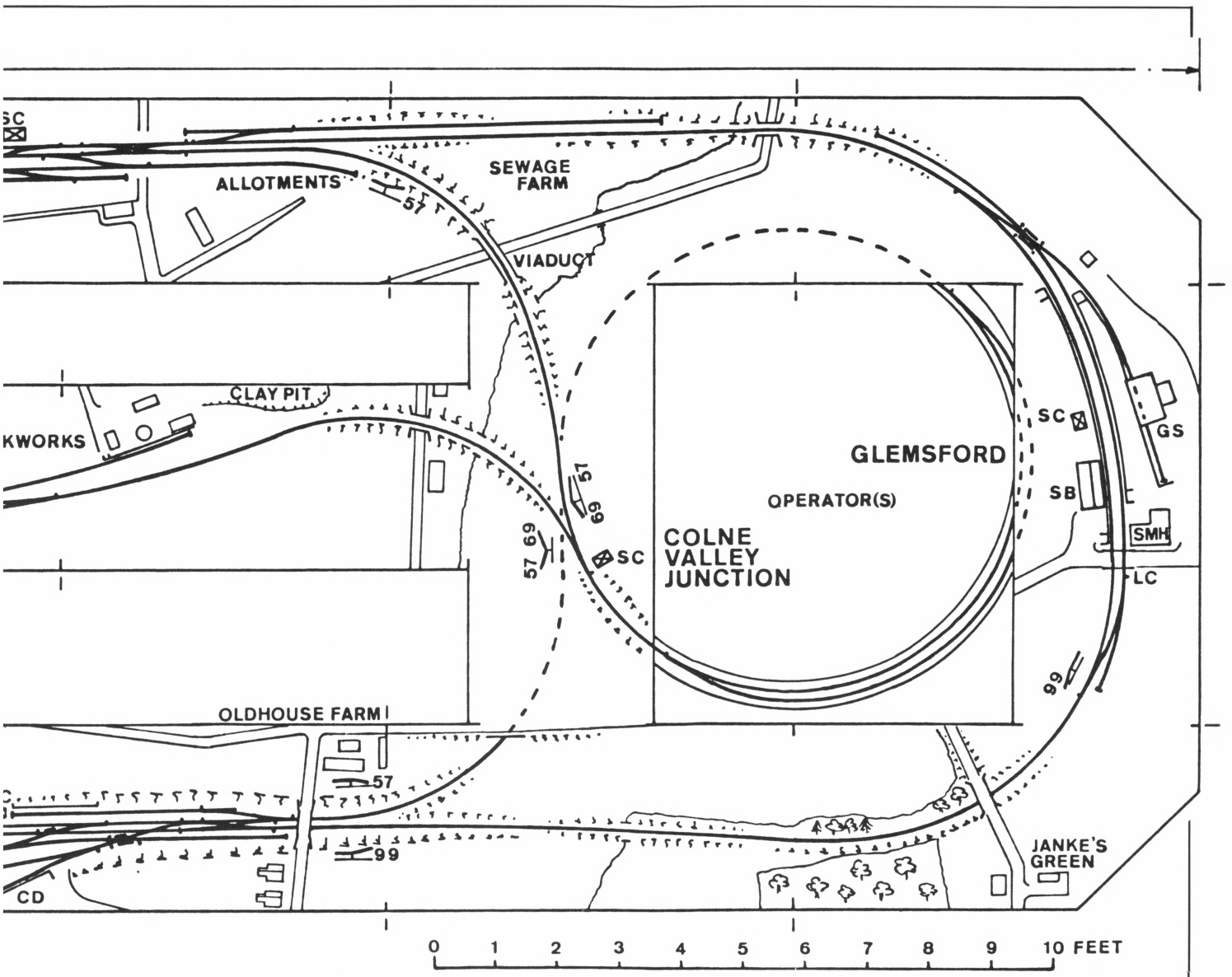


Colne Valley & Halstead Railway 2–4–2T No. 4 Hedingham *shunting at Haverhill South on 29th July 1911.* LCGB/KEN NUNN COLLECTION

stuck out of the roof of the early Saxby & Farmer box.

Glemsford is a compact through station on the line to Long Melford. Having only one passenger line, however, could be too much of a restriction – prototypical but frustrating as a passenger train can pass a goods but not another passenger train.

This brings us to Chappel, or, as it was later called, Chappel & Wakes Colne, with even more complicated pointwork in a smaller station. The down line of the scissors at the junction has one turnout tandemed and the other overlapped by a further turnout to the goods yard via a diamond across the up and then a double slip. As there is no separate platform for the CV&H passenger train, I presume



that it rounded after arrival and then stabled on the refuge siding by the box, coming out again after its GER connection had moved on. CV&H goods exchange traffic would have been put in the through siding behind the up platform. Immediately to the south of Chappel station is the Colne Viaduct, compressed unless you have room for all of its 32 spans.

A loop has been provided on the hidden portion of the CV&H main line so that the next train to arrive at Chappel is not necessarily the last to leave Haverhill and vice-versa. This track is hidden below removable scenery at Glemsford, which performs the same operational function on the GER line.

At the other end of the layout, Withersfield does the same. While it has the layout of Sturmer, this station site is imaginary. There was no such station west of Haverhill – Sturmer was actually the next station to the east!

The core operation of the layout is the running of services on the Great Eastern as the main line, with Colne Valley & Halstead services as a branch making connections at both ends of its route. CV&H goods trains shunt at Haverhill South en route.

While there is plenty of information and material available to model the Great Eastern, the CV&H is another matter. As I recall, a drawing of their 0–6–2T has been published in the model railway press and also two or three wagon drawings. Going back into the past, I seem to recall a drawing of one of their older tank locos, a 2–4–0T or 0–4–2T, in the *Model Engineer* in the early 1940s. Hamilton Ellis tells us that they even had an ex-LBSC Craven tank engine in earlier days.

Finally, an opportunity to attempt scale smells. The sewage farm east of Haverhill was just that – the untreated sewage was spread on the field to let nature take its course.

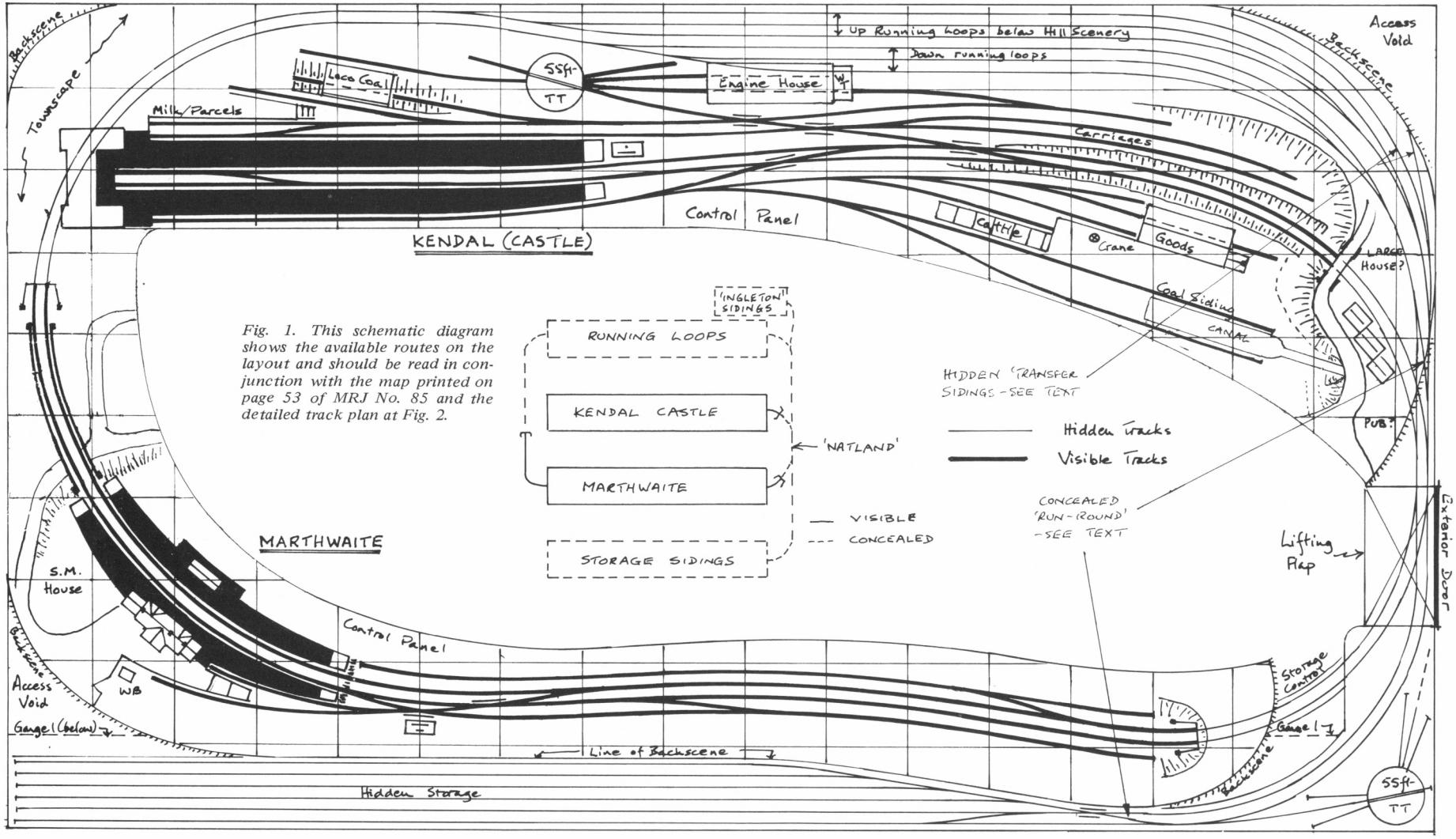


Fig. 1. This schematic diagram shows the available routes on the layout and should be read in conjunction with the map printed on page 53 of MRJ No. 85 and the detailed track plan at Fig. 2.

Fig. 2. The full track plan again, including the hidden tracks which are vital to the operational scenario. It is slightly changed from the version shown in MRJ No. 86 to allow for adjustments during the building process. I should state that at the time of writing, the hidden turntable in the storage area has not been built. Preliminary layout trials suggest that 'crane shunting' will not prove difficult when working in strictly prototype mode with competent operators. I therefore may not complicate the layout with this feature.

THE LAST GREAT PROJECT

The Kendal Branch is running, and DAVID JENKINSON explains how it works:

The layout room with carpets laid, workshop facilities relocated into the central area and sky backscene nearly complete. Since this view was taken, the gap between the two sky areas behind the terminus has been closed-up.

When I was a museum curator, I was privileged to meet the late R.A. Riddles, the last proper CME of our railway system. He had been William Stanier's personal assistant on the LMS and was elderly when I first met him, but his mind was still active and among many pearls of wisdom I gained from him was this comment: "Decision making is easy — identifying the problem is the headache."

I think this is true of our hobby, especially when trying to determine what we want before starting a course of action. Having tackled many layouts, I concluded that what mattered most to me was to re-create the operational characteristics of the historic steam railway, using models which looked as accurate as I could manage. Thus, I have no wish to model meadows (though I respect those who gain satisfaction this way) and neither am I too bothered whether my models are accurate to the last micron.

My layout represents a branch whose dominant traffic is presumed to relate to the real Settle & Carlisle main line. Thus, the first stage was to arrive at a series of branch workings which made logical connections with the former Midland main line in early post-Grouping days. This was done by determining the time at which real trains actually passed Dent Head c.1930. I used the LMS working timetable for this, and, of course, it also included all the goods trains.

Given that there were only three or four stopping trains each way daily on the main line, I thought I might just as well 'meet' all of them. This gave me approximate arrival and departure times at Dent Head for branch passenger trains, from which I could calculate reasonable transit items to and from Kendal, using the distance and gradient profile as a basis (see MRJ No. 88, page 192). Trains to Kendal, mostly downhill from Dent Head, would be faster than those coming the other way, and I finally arrived at a sort of standard transit time (including stops) of about 64 minutes in the predominantly uphill direction and about 50 minutes the other way. These were then plotted onto a conventional train graph which then indicated where paths could be found for other services, including my pseudo-expresses (MRJ No. 88, page 195). These were given faster transit times, since they would only make one stop (Marthwaite). Finally, the goods train paths were inserted (connecting with the real LMS main line pick-up goods trains at Dent Head) and given much longer transit times including extended station stops for shunting. Eventually I could picture it all in my mind and *Fig. 3* shows part of the daily train graph as amplification.

Study of this graph reveals that there are a lot of trains marked between Kendal and Natland which do not go to or come from Dent Head. These represent workings to and from the ex-Furness line and were also planned relative to prototype reality, this time making connections (as revealed by the real LMS timetable) with services between Carnforth and Barrow. On the layout, they would run directly between Kendal and the hidden storage tracks and should, in theory, never appear at Marthwaite, the hidden double junctions (Natland) taking care of this nicely.

What about any trains which might have run direct from the Furness line to Dent Head (avoiding Kendal), not to mention transfer traffic (including the steam railmotor) between Marthwaite and the LNWR Ingleton–Low Gill

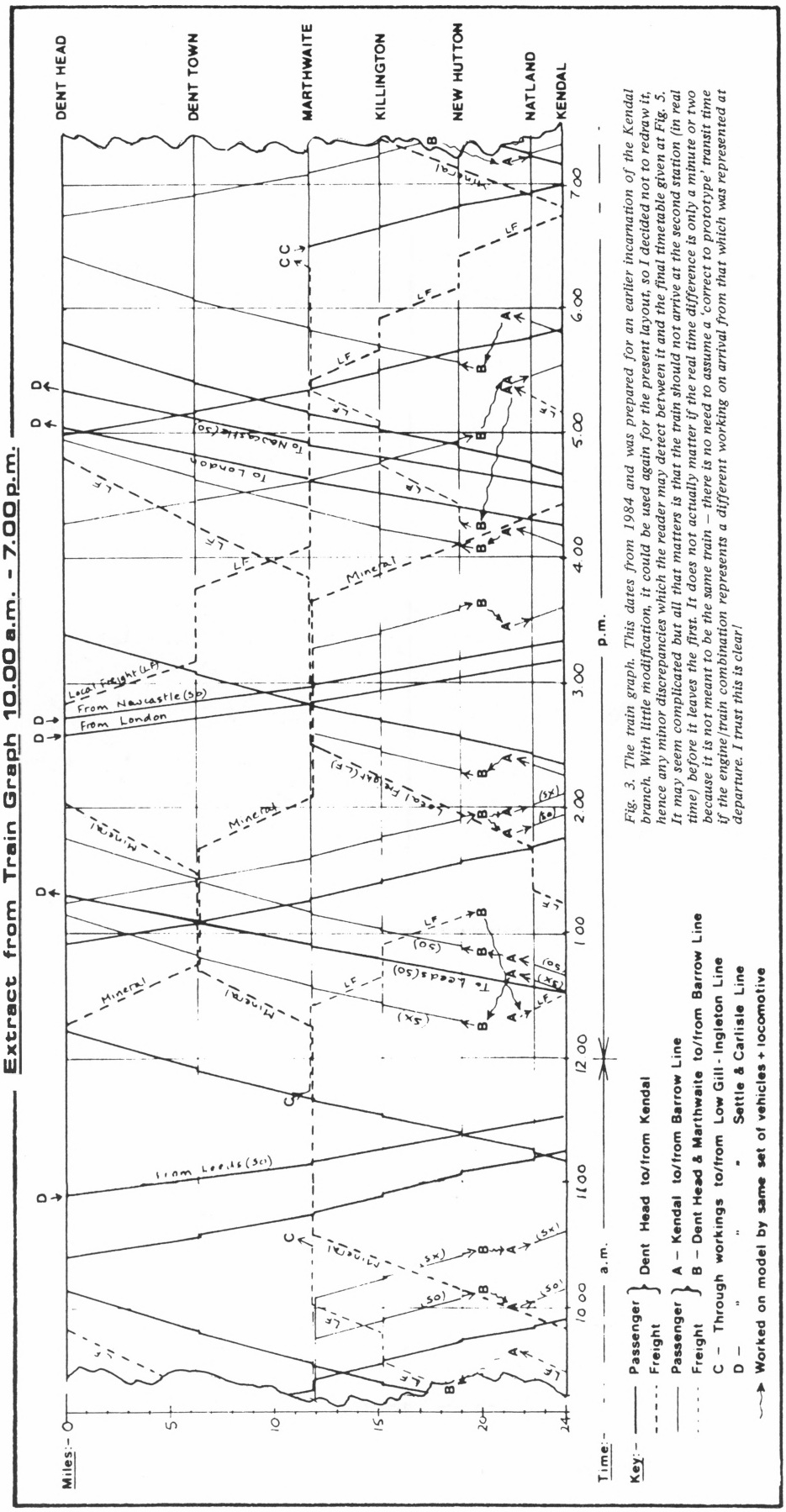


Fig. 3. The train graph. This dates from 1984 and was prepared for an earlier incarnation of the Kendal branch. With little modification, it could be used again for the present layout, so I decided not to redraw it, hence any minor discrepancies which the reader may detect between it and the final timetable given at Fig. 5. It may seem complicated but all that matters is that the train should not arrive at the second station (in real time) before it leaves the first. It does not actually matter if the real time difference is only a minute or two because it is not meant to be the same train – there is no need to assume a 'correct to prototype' transit time if the engine/train combination represents a different working on arrival from that which was represented at departure. I trust this is clear!

route? Could I get these into play? The answer turned out to be yes, although the track plan had to offer two additional facilities: (A) As far as transfer traffic to/from Marthwaite was concerned, this could be achieved with a pair of dead-end sidings in the running loop area below Kendal set in opposite orientation to the storage tracks behind Marthwaite; (B) Some trains leaving from or arriving at Kendal, ostensibly to or from the Furness line, could appear at/depart from Marthwaite as if coming from (or bound direct for) the Furness line. They would thus change identity out of sight, provided they could be held unseen for sufficient time so as not to destroy the illusion on the visible layout. During this layover, the locomotive could perhaps be changed to aid the subterfuge, offering a sound reason for a few more engines than first planned.

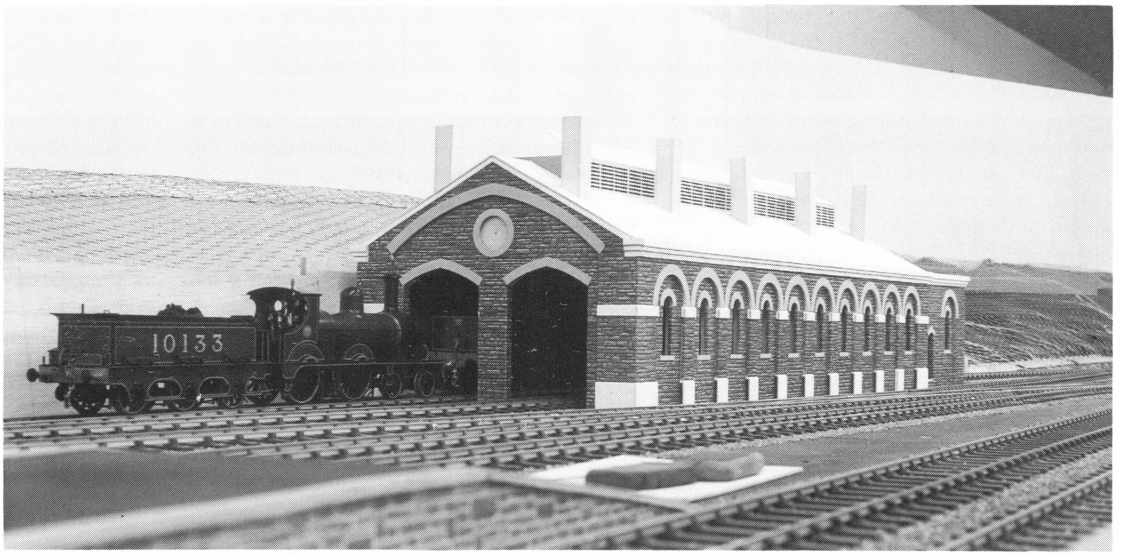
It therefore became important to design the hidden tracks as carefully as the visible bits. In particular, the hidden storage area could not be a simple set of conventional dead-end tracks. It had to provide a completely independent hidden run-round facility and a turntable and also have its own control panel. Since it included both double junctions, this would make it the key operational location for the full sequence. This is why the whole system had to be fully tested before scenic development started. Obviously, access to the hidden tracks is vital.

To summarise, the layout as finalised is able to meet any and all of the following operational criteria:

- End-to-end working (both directions) from Kendal to the storage area via Marthwaite.
- End-to-end working (both directions) from Kendal direct to the storage.
- Shuttle working (both directions) between Marthwaite and the storage area via the tunnel at the Kendal end of Marthwaite.
- Termination and/or reversal (including running round) of both passenger and goods trains at Marthwaite.
- Tail-chasing round the continuous circuit, mainly for locomotive testing purposes and running out-of-period display trains. It's also a useful option when operating solo or when non-railway minded visitors want to see the toy trains! But anyway, I would always advocate some form of continuous circuit if you have the space, for there is nothing like a long run to get an engine to a good, free-running and controllable state — and it's also quite relaxing to watch.

CONTROL

I am an adherent of what was once (and may still be) called 'cab control', based on common return wiring and individual power supply — i.e. separate transformers for each and every control unit. This method has been described many times in print, so I won't do it again, but for those who may not have encountered it, I will outline some of the more important principles. I use the word 'controller' exclusively in reference to the actual power unit which makes the engines move (the human controller is called an operator).

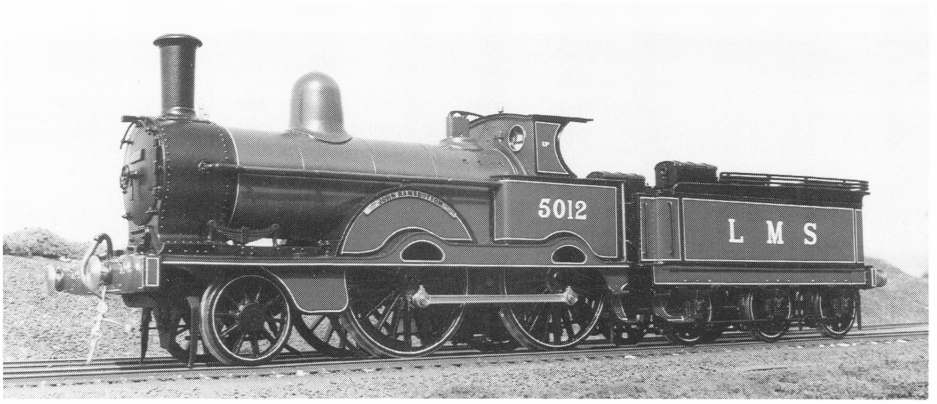


Kendal loco shed (based on St. Albans) from Platform 3 – finishing details still to be added. The wire mesh support for the eventual hard shell scenery is in place above the running loops (the white roofs of a concealed out-of-period LNWR train can just be seen to the right of the shed) and the track cleaners mark the eventual position of the signal box. Ex-FR 4–4–0 No. 10133 is about to come off shed for a Barrow line working.

The whole layout is divided into a series of sections, usually defined by the actual track formations and arranged generally so that each section forms a logical unit, such as a fan of sidings from a common throat, a separate lay-by, the goods yard, etc. The feed to each track section comes via a rotary switch on the control panel (usually six position in my case, at least one of them being 'off') which thus ensures that any one of the several controllers (but only one at a time) can access the section in question. Normally, each section can be switched to all the separate controllers at the nearest control panel, but in many cases, the section can also be switched across to an adjacent panel (see *Fig. 4*).

I reckoned it would be counter-productive to have a single control panel for the whole layout, even though this is perfectly possible and arguably simpler to instal. I wanted a system where each operator was responsible for activity at his own station and this would create mayhem with only one master control panel and maybe three or more folk trying to use it at the same time! I elected to use three control panels, one each at Kendal, Marthwaite and the storage area (referred to as Natland). Each panel has overriding control of the track sections at that station, but every one of them can also gain access to a certain number of sections at the other locations.

The extent of this overlap facility needed to be carefully thought out and in the end I decided to play through the proposed timetable using coloured pins to represent trains on a track plan. This also revealed a few cases where the operational pattern could be improved if I could slightly fine-tune the track plan. For example, it showed that one of the two local passenger sets on the Midland line, albeit based at Kendal, would be best if stabled overnight at Marthwaite, thus allowing an early morning/late evening service between Marthwaite and Kendal only. In turn this made it important to be able to run-round the train at Marthwaite. And if this could be achieved,



The ability to change identity of trains on the Barrow line gave excuse for a few extra locomotives to those outlined in MRJ No. 88. This is the first fruit – a superb ex-LNWR Webb 2–4–0 'Jumbo' No. 5012 John Ramsbottom *recently completed for me by my old friend Geoff Holt. It was painted by Larry Goddard in the post-1928 LMS red livery, to which it was not officially entitled. There were actually four red 'Jumbos' and No. 5012 really did get the 1928 LMS insignia.*

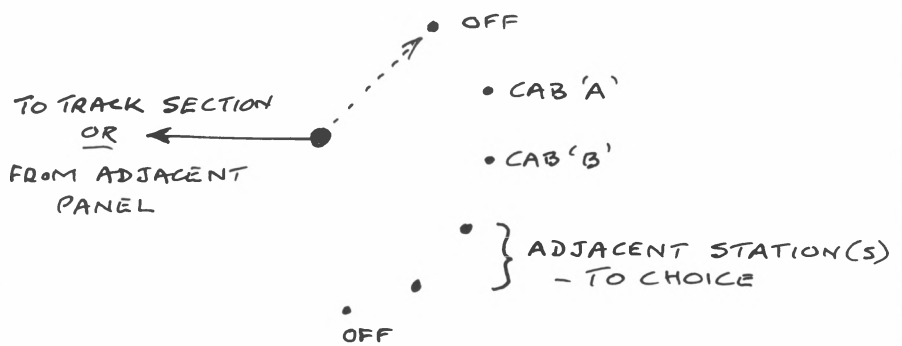


Fig. 4. A typical rotary switch arrangement as used on the new layout – in this case six position, though the number of positions can vary without affecting the principle. It is located on the 'feed side' only of the wiring assembly since common return wiring is assumed for the other half. It will be appreciated that where a track section is capable of being switched to more than one control panel, there will be at least two such rotary switches between the actual track feed position on the layout and the control unit itself, but by using this method one can ensure that only one controller can gain access to any specific track section at any one time.

then the services between the Furness line and Dent Head, avoiding Kendal, could also occasionally terminate at Marthwaite. My final timetable (*Fig. 5*) allows for these refinements.

I could have made things easy by putting an extra trailing crossover at Marthwaite in the main line near the exit from the Down lay-by but, having seen how they did it with short goods trains at the real Dent station, all I actually needed to do was allow enough length to hold a short passenger set between the two release crossovers from the up side lay-by to the up main line. Moving the Kendal-end release crossover about 1ft towards the tunnel mouth did the trick and saved a whole additional main line crossover and signals.

My underlying philosophy is based on the prototype operational concept of a station location being responsible for all movements within station limits and for all main line movements *towards* that station. Imagine a train proceeding from Kendal to the storage area via Marthwaite. Kendal prepares the train ready for departure and at that point offers it to Marthwaite. On acceptance, Kendal sets the road out of the terminus, switches all relevant track sections to the Marthwaite panel and then gives 'train entering section'. At this point, the operator at *Marthwaite* drives the train out of Kendal — and since the road and sections have been set by Kendal, the Marthwaite operator does not even need to know from which platform the train is leaving, he simply drives the train.

In fact, of course, such a movement must go via the concealed double junctions which belong to Natland, and Kendal must first seek clearance from Natland (after all, Natland may be shunting across the junctions) to ensure that the junctions are clear and that the track sections can be switched accordingly.

When the Marthwaite operator gets the train and it has finished activity at the station and is ready to depart, all under local control, he offers the train to Natland via the running loops below Kendal. On acceptance, the train is despatched *by Marthwaite* into an empty running loop, all of which are wired so that the train will simply come to a dead stop before it reaches the fouling point at the exit from the loops. Marthwaite knows when this happens via an indicator light on his panel and then gives 'train entering section' to the Natland operator who takes over complete control of the train, whenever it may be convenient, prior to making it ready for its return trip (the latter without reference to either Marthwaite or Kendal until its due departure time). The reverse procedure is similar. Natland prepares the train, offers it to Marthwaite and on acceptance, puts the train into one of the Down running loops, giving 'train entering section' when the train stops. And so on.

It will be clear that the Natland operator is the key person in the full sequence, usually being involved in every train movement outside the Kendal and Marthwaite station limits simply because of the two double junctions. In effect, Natland is a sort of Regional Control Office for the whole layout as far as the operational programme is concerned, as well as having its own trains to shunt, reverse, etc. On those occasions when the layout cannot call on a full team of three or more operators, two options are possible. With two operators, a likely scenario is that Natland doubles with Marthwaite, the operator preparing trains in the storage area as before but also taking charge of Marthwaite as and when required. But with one operator only, Marthwaite has been designed as the sole location which is able to control the whole circuit and in this situation can run the layout in two modes — conventional, non-prototypical tail-chasing being one. The other will be to switch all the relevant track sections to Marthwaite, load up Kendal and Natland with a set of outward-facing trains and let them exchange places until the situation arises when the operator has to suspend action to go and sort out the muddle at each of the terminal locations! In either case, the full potential of the layout will best be seen when all three panels are manned, though two operators would be able to get quite close.

In an earlier article, I explained how Norman Solomon had offered to devise a control system to meet my needs. I wanted these to use miniature switchgear and indicator lights, and the panels to be geographically located on the layout and not to impose on the scenery. They were made up by Norman off-site. Even so, we made use of a great deal of recovered material from my old layouts. The Natland panel would be powered up by my old faithful Codar CT2000 unit (one of the first of the modern 'simulator' units and originally employed on 'Garsdale Road' in 1970), while the two main stations would each have a pair of Gaugemaster panel-mounted controllers, again with simulators. I also had four H&M

LONDON MIDLAND AND SCOTTISH RAILWAY

EXTRACT FROM PUBLIC TIMETABLE:
KENDAL CASTLE AND ARNSIDE TO MARTHWAITE AND DENT HEAD: SUMMER SATURDAYS, 1930

UP TRAINS

KENDAL CASTLE	(dep)	12(a)15	6(b)40			7 30			9 02	11 10	12(d)/32	
Natland	(dep)	-	6(b)45			7 35			9 07	11 15	-	
ARNSIDE	(dep)				6 32		8(c)12					12(e)/31
Sandside	(dep)				6 38		8(c)18					12/37
Heversham	(dep)				6 42		8(c)22					12/41
Sedgewick	(dep)				7 00		8(b)44					12/49
New Hutton	(dep)	-	6(b)54		7 05	7 44	8(b)49		9 16	11 25	-	12/54
Killington	(dep)	-	7(b)02		7 12	7 52	8(b)57		9 24	11 32	-	1/02
MARTHWAITE	(dep)	12(a)45	7(b)10		7 20	8 00	9(b)05		9 33	11 40	12(d)/54	1/10
Dent Town	(dep)	-			7 35	8 15			9 48	11 55	-	1/25
DENT HEAD	(arr)	1(a)10			7 55	8 34			10 08	12/14	1(d)/19	1/45

Notes:
(a) Through Carriages and sleeping cars (first and third class) to London(St Pancras), Sleeping car passengers may occupy berths at Kendal from 10,30pm, Sleeping car passengers from Marthwaite may, if they so wish, join the train at Kendal (10,40pm from Marthwaite) without extra charge.
(b) Steam Railcar, third class only
(c) Change at Sedgewick
(d) To Leeds(Wellington), through carriages to Bradford(Forster Square), Manchester(Victoria) and Liverpool(Central)
(e) From Barrow-in-Furness (dep, 9,5bam)

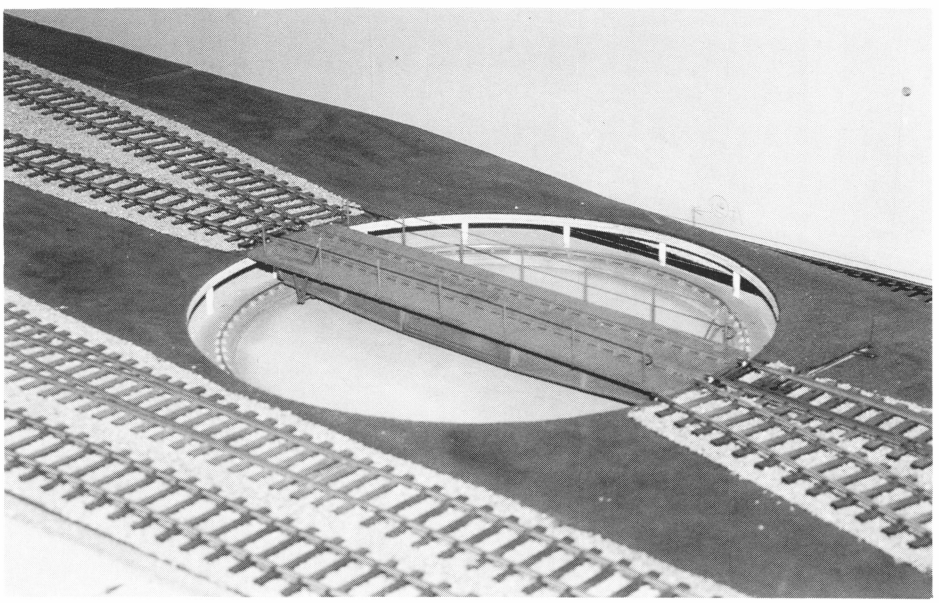
DOWN TRAINS

DENT HEAD	(dep)	3(a)50			3 00	3 20	10 25	10(e)55	12/55		
Dent Town	(dep)	-			9 10	9 30	10 35	-	1/05		
MARTHWAITE	(dep)	4(a)10	8(b)05	8 10	9 25	9 45	10 45	11(e)10	1/16		1(b)/36
Killington	(dep)	-	8(b)14	8 19	9 34	9 54	10 54	-	1/25		1(b)/45
New Hutton	(dep)	-	8(b)25	8 30	9 45	10 05	11 05	-	1/34		1(b)/54
Sedgewick	(dep)		8(b)29			10 09					1(b)/58
Heversham	(dep)		9(c)14			10 17					2(c)/35
Sandside	(dep)		9(c)18			10 21					2(c)/39
ARNSIDE	(arr)		9(c)24			10(d)27					2(c)/44
Natland	(dep)	-		8 38	9 50		11 11	-	1/41		
KENDAL CASTLE	(arr)	4(a)35		8 42	9 55		11 15	11(e)32	1/45		

Notes:
(a) Through Carriages and sleeping cars (first and third class) from London(St Pancras), Sleeping car passengers may remain in their berths until 7,15am, Sleeping car passengers for Marthwaite may, if they so wish, travel to Kendal and return at 8,40am or 7,30am without extra charge.
(b) Steam Railcar, third class only
(c) Change at Sedgewick
(d) To Barrow-in-Furness (arr, 11,20am)
(e) From Leeds(Wellington), through carriages from Bradford(Forster Square), Liverpool(Central) and Manchester(Victoria).

Fig. 5. This is really a piece of creative nonsense given that it is arguably unnecessary to go to the trouble of actually drawing up a timetable itself in order to operate the layout, but I enjoy the mental processes involved and have prepared similar versions for the Kendal–Arnside and Marthwaite–Ingleton lines as well. In accordance with LMS practice, a vertical line between hours and minutes denotes p.m. This timetable extract (to which should be added all the freight and light engine movements) covers about half the planned operational sequence, starting with the arrival of the sleeping cars from London.

There is still almost everything to do by way of scenery at the terminus, as this picture reveals, but ignore the soon to be hidden running loops (upper left-hand corner). This view of the completed trackwork at Kendal (taken during the third full operational evaluation of the system) gives promise that the hoped-for spaciousness will probably be achieved. The distance from the extreme foreground to the overbridge in the far distance is considerably less than a quarter of a mile in scale terms, but it is an acceptable compromise to my eyes.
BARRY C. LANE

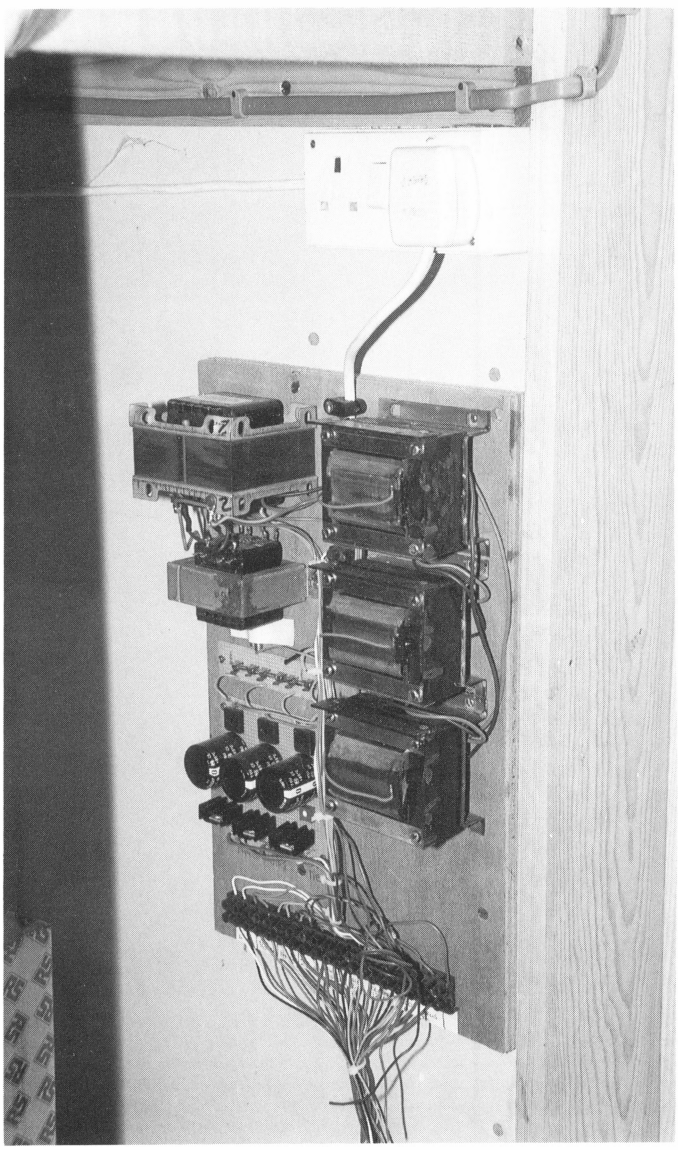


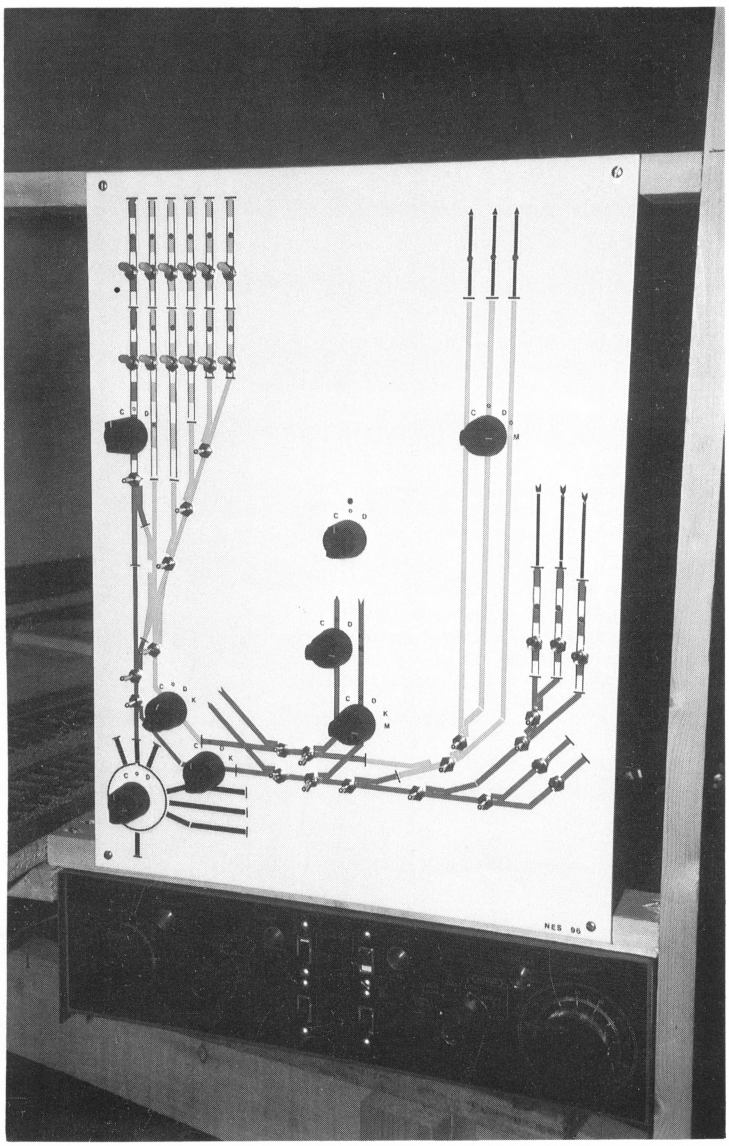
The turntable was installed prior to its approach trackage being laid. This was to allow for any slight positional adjustments, both in terms of making the turntable move freely and avoiding any clearance problems with the hidden trackwork below the station. Tracks leading to the turntable are thus set to the actual alignment and deck level of the table as installed, much simpler (and better) than doing it the other way round. As we progressed, it was found desirable to simplify the trackwork on the engine shed side of the turntable (see earlier track plan) by eliminating the proposed spur behind the shed and incorporating a turnout (right-hand side) rather than have all three remaining tracks diverging direct from the deck as originally planned. This had the practical benefit of leaving only two operational alignments for the turntable, each of which was straight across the deck. It also looked better, simplified the wiring and gave scope for the eventual mechanical operation of the deck rather than face the implications of motorised drive with umpteen possible positions and heaven knows how much unwanted complexity . . .

Safety Minors — wonderful little units, dating back to 'Little Long Drag'. Norman hit upon the rather bright idea of dismantling three of them so as to get at their transformers, the fourth being retained for bench testing, mini-drill operation and the like. All transformers, including two others which I had had for the old 7mm layouts, were neatly mounted on a suitable board and placed near the mains power supply to form a miniature sub-station from which almost everything would draw its power, and this board is completely covered in with a screw-down lid for safety's sake.

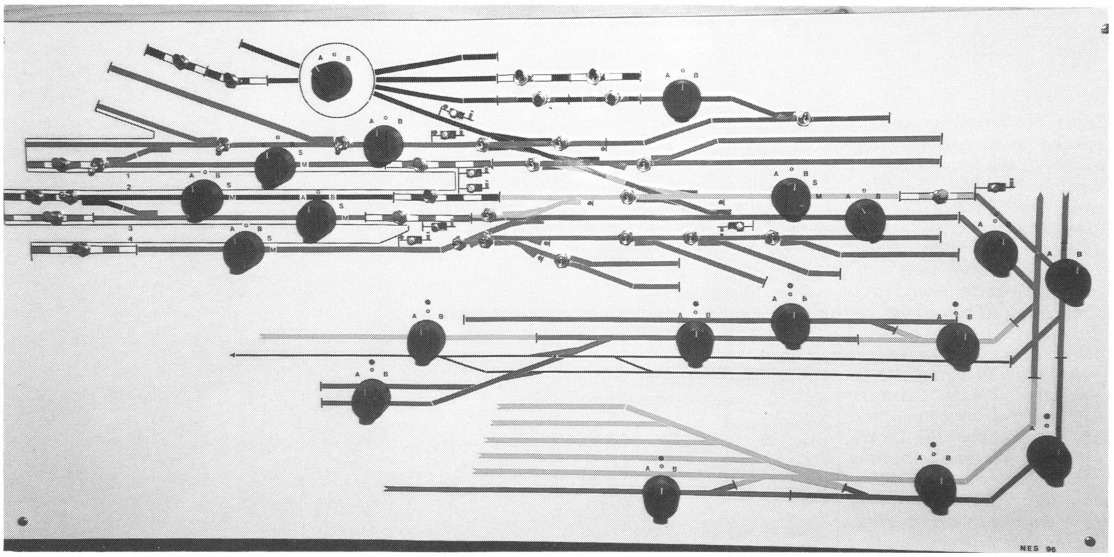
Some of the transformer outputs have been dedicated to point motors, signals, etc, the others are used for traction supply at Kendal and Marthwaite. All that remained to re-use, if possible, was point motors. I had enough Peco point motors to take care of the hidden turnouts (themselves Peco anyway) but I did not have enough of my old faithful H&M SM3 point motors (many dating from the time when you could buy them for 7/6d in old money!) to cater for the two main stations. I chose to use the slow-motion Fulgurex units; these do not permit a passing-contact form of operation (often implemented by way of the electric pencil which I had always previously used), so, for consistency, all points are activated by panel-mounted miniature switches geographically positioned on the panels themselves — passing-contact for the Peco units, of course.

The location and type of the signals themselves has also been determined and facilities planned in to the control panels to allow them all to be working, again using geographically-mounted miniature switches. At the time of writing, they are still to be made, along with most cosmetic features of the layout. Although the signals will not be fully interlocked with the track current, they will play a very important role in the operation of the layout. Signals will be interlocked to the extent that they cannot be pulled 'off' unless points are properly set, but they will not be linked with traction current to the locomotives, so it will be possible to run past them at danger — a deliberate omission to keep the operators alert and also to act as a near-equivalent to the prototype in pre-track-circuited days. Distants will be located below the starters at both ends of Marthwaite and at the departure end of Kendal. This will give them authentic positioning, but I also hope to use them as visual indicators of the 'state of the road' in the hidden areas. The single distant at the Up end of Marthwaite will, when 'on', indicate that the train will stop in





Left: *The sub-station, taken before its safety cover was added. The various outputs to track and signals are grouped in the chocolate block connectors at the lower edge, all of them being labelled as to their specific role. The whole lot is fed from a single 13-amp point set above the mounting board with its own plug. There are also three independent fuses within the complex.* Right: *The first panel to be installed was in the storage area (Natland). Its vertical shape was determined by the available space behind the tunnel mouth at the Kendal end of Marthwaite (see Fig. 2) but this allowed for the track plan to be arranged in correct orientation in relation to the operating position at this point.*

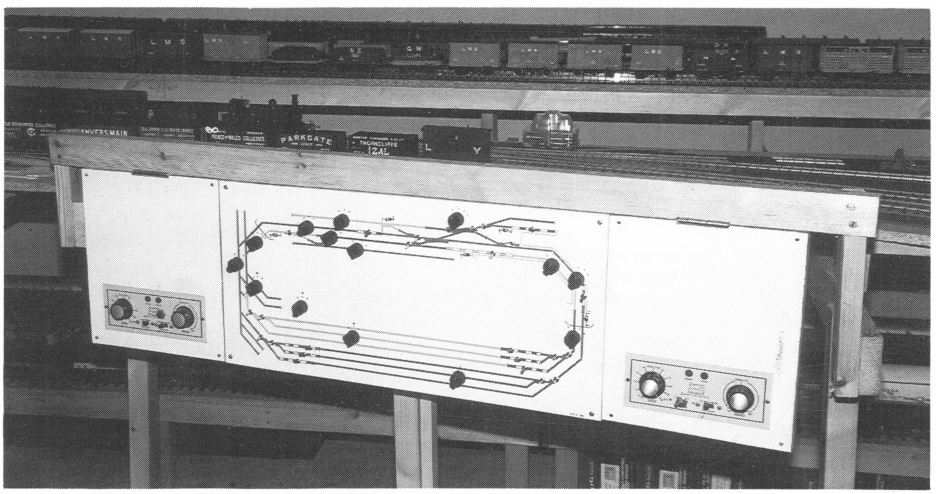


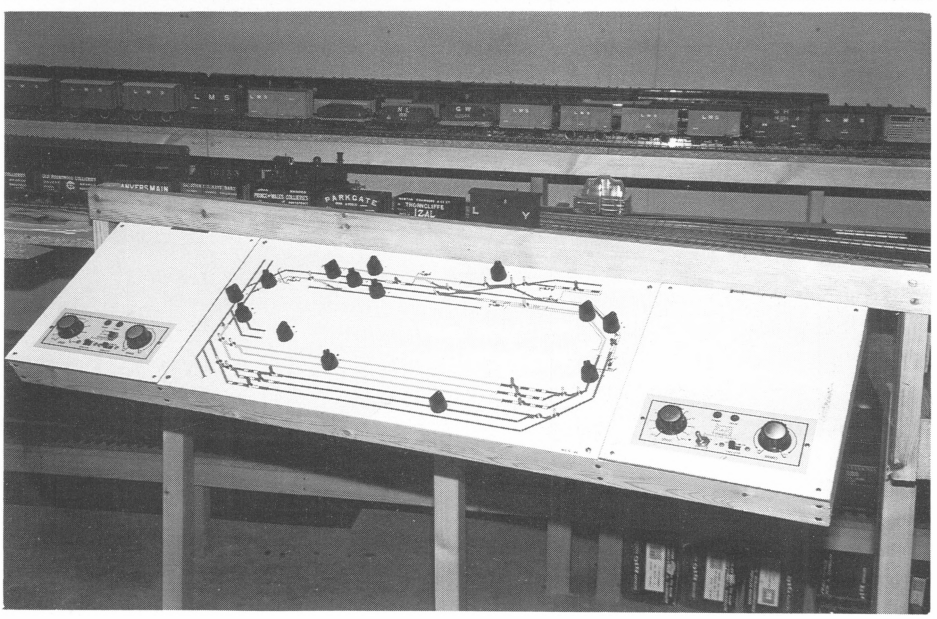
This station has limited access to the rest of the system, being confined to the ability to drive trains inwards from Natland and/or Marthwaite.

the Up running loop; but when 'off' will indicate that the Marthwaite panel has full control over the whole Up main line circuit through both double junctions (tail-chase mode).

At the Kendal end of Marthwaite and the departure line from Kendal, the starters will be set above splitting distants. Prototypically, these would give Marthwaite advance information for the junction to the ex-LNWR line beyond the tunnel and at the Kendal end would give advance information of the state of the road at Natland. In fact, I hope to make them serve as route reminders by indicating the setting of the hidden double junctions. If 'on', they will show that Natland has full control over those junctions, and when 'off' they will show the operators at Kendal and Marthwaite not only which of the two possible routes is set but also that Kendal and/or Marthwaite has the junction section(s) and can themselves drive the train through the junctions. At this stage I am quite unable to predict how much this will be used in practice but it seemed worth incorporating from the outset.

As stated in an earlier part, this layout is the distillation of some 35 years experience of modelling since my first EM gauge experiments in 1961–2 and the fact that it has come together rather quickly is almost certainly because I devoted so much time to thinking it through first. In the space of not much more than a year, the layout has moved from an empty site to a fully-operational system which has already proved to work as well as I had ever imagined it would. It is almost fully-stocked with locomotives and rolling stock and although almost everything remains to be done on the visual side of the display, my friends and I can at least play with the trains again as an antidote to the often tedious work of scenery and building construction. It thus seems that the long wait was well worthwhile and if, by recounting my experiences, I have helped even a few readers to shorten their own thinking time, that will be a rather nice bonus.





The nearest approach to a master control panel is at Marthwaite, the only location which can actually drive trains all round the circuit. These two views show the panel in both its passive and active positions. When trains are not running, the panels at Kendal and Marthwaite have both been arranged to drop down vertically so as to locate flush with the edge of the baseboard and scenery.

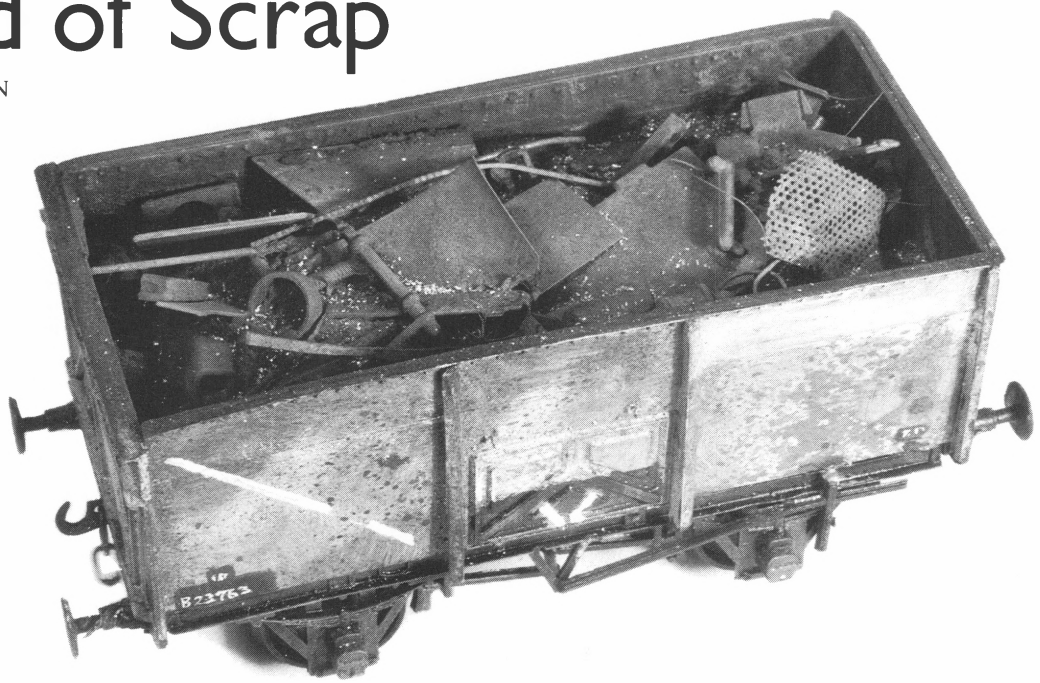
REAL ATMOSPHERE

It is so tempting to get carried away filling every available space on a layout with lineside clutter, simply to make it 'more interesting'. Whilst this can add character to any scene, sometimes understatement may be better employed for visual effect, and, to illustrate this, we have selected a quiet moment believed photographed at Brackley (Great Central). The model version would no doubt have the inevitable cameo scene with men busy loading various items, and the foreground would be littered with barrels, crates, etc, but here we just see two lorries parked neatly under the awning. Similarly, the second view invites the modeller to place another siding butting up to the goods shed wall, or, if this could not be arranged, then at least an assortment of discarded boxes, pallets or even the dreaded spare wagon wheels piled in a heap. When in doubt, study the prototype for guidance. Although the interesting variety of stock suggests a busy yard, the bareness of the foreground serves to highlight the main attraction, namely the goods shed, and the eye is guided towards this building by the tracks either side. Further embellishment on a model would be a distraction. A solitary telegraph pole adds vertical contrast to the angular roof whilst the loading gauge appears somewhat complex on closer inspection. In more modern times, the same location would probably be overgrown with grass, weeds and a general encrustation of foliage, but in earlier days, goods yards tended to be better cared for, as these photographs simply demonstrate.

STAN TAYLOR
CTY. PETER DENNY

A Load of Scrap

by TIM SHACKLETON



I've never been much sold on the virtues of tidiness, although orderliness – another matter entirely – is to be encouraged. Why, my argument goes, spend ten minutes at the end of every modelling session putting everything neatly away when you're only going to get it all out again next time? On a cumulative basis, taken over a year or so, those ten wasted minutes add up to a decent kit or two in building time.

So my workbench tends to look like it's been ransacked, even if I do like to think I know where everything is. Every now and then, though, it gets a bit beyond the pale and I have a sort-out. Once the tools are back in their cases and the tops are on all the bottles, I'm left with a bench strewn with filings, swarf, offcuts, rejects and other detritus of the modeller's art that has been built up over many patient hours.

Where does this go? In the bin? No, it goes into little boxes. Whitemetal is segregated out, to be melted down into useful weights for rolling stock, cast in simple wooden moulds. The rest – brass, nickel, plastic, whatever – is recycled into wagon loads, specifically of scrap metal.

In real life the steel industry has always been big on recycling. To the new steel made from raw materials – iron ore, coal and limestone – a higher proportion of scrap steel will always be added. The feedstocks used in some high-quality engineering grade steels are 100% recycled scrap. Over 95% of the steel in a typical car will eventually be recycled (I know this because I recently wrote a corporate brochure for British Steel . . .).

A lot of this scrap metal goes by rail, even today. For years it was carried in 16T mineral wagons, often running singly, but nowadays we have specialised wagons such as the twin-axle POA and the

A few sessions at the workbench will quickly generate more than enough scrap material for this project.

Left: *Plasticine is formed into a rough heap-shape on a base of Plastikard. There's no need to glue it in place in the wagon.* Right: *The 'scrap' is then pressed into the Plasticine and the gaps gradually filled. Strive for a random effect.*

Once primed, the load is brush-painted in well-thinned acrylics. Airbrushing gives too even an effect.

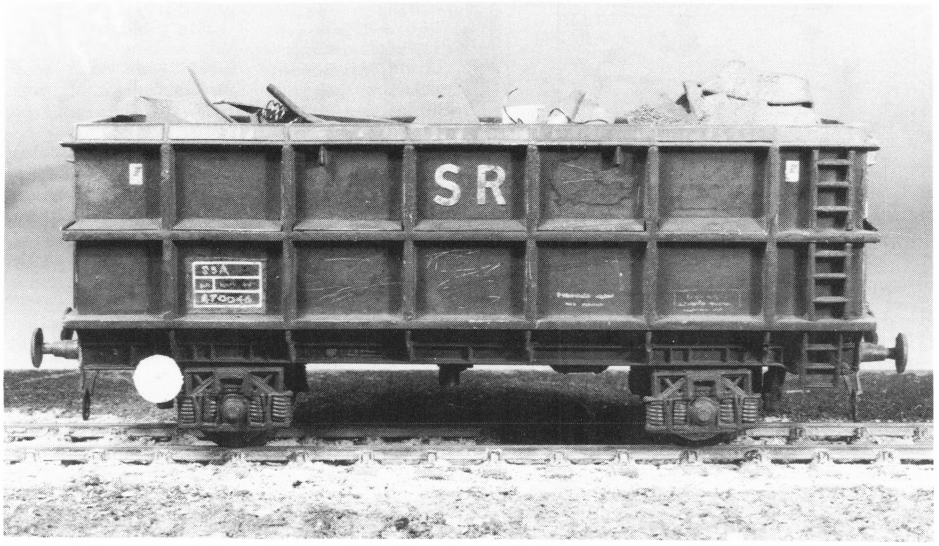
A heavy sprinkling of filings – whitemetal in this case – will settle into corners and bring the whole thing to life.

impressive bogie PXA, both available in 4mm kit form from Cambrian Models and Appleby Model Engineering respectively. Lately, Bachmann have done a ready-to-run POA.

Tipping my hat modestly in Martyn Welch's direction, my photographs show how I've modelled this traffic in wagon-load form. To make the scrap loads removable, I build them up on a mound of Plasticine on a Plastikard former. Having induced the necessary bends, kinks and twists, I add the salvaged material at random. Real scrap consists mostly of offcuts, swarf and buckled sheet, and rarely includes great thick lumps of solid metal, so you must avoid anything that looks too obviously like a length of T-section Plastruct or the double chimney from a 'King'. It is worth trying to suggest how the load would settle in transit – i.e. with no bits precariously balanced so they can fall off and decapitate someone.

Having arrived at a satisfactory heap, the whole lot is then sprayed with white primer – red oxide tends to overpower everything. 'Old' rust is a much deeper colour than more recent corrosion, although the tones of scrap metal are surprisingly unified when seen from normal viewing distances. To achieve the desired result, I brush-paint 'rust' colours in various shades and, while still wet, sprinkle the outcome with whitemetal filings to add texture. Further attacks with paint and, in particular, Carr's weathering powders, will add to the general effect, while little bare-metal shavings look wonderful – try drilling or deburring an offcut of nickel-silver to create them. Obviously, some discrimination is necessary and it is great fun to

spot potential material ahead of time. Wire trimmings, superfluous castings and spare etchings discarded during the kit-building process can all have their place, but, when recycling fret waste, we need to make sure that no part-identification numbers are visible. Status-conscious modellers, however, may impress their peers by discreetly burnishing any edge-of-fret imprimaturs ('Malcolm Mitchell Design', 'Martin Finney') that may be visible.



POA scrap carrier from the excellent Cambrian kit. These wagons look really seedy – the bright blue livery, with yellow ends and top panels, only adds to the tacky effect. I scratched away at the paint finish with a wooden cocktail stick to bring out the general scarring. This model is loaded with fret waste, crushed in a vice until it becomes unrecognisable.

Misc.

FESTIVAL OF RAILWAY MODELLING

Now in its third year, this event will feature 35 layouts from 'N' to 'O' with a wide range of modelling demonstrations and displays plus assorted trade stands. It is organised by Warners Group Publications PLC, the publishers of *British Railway Modelling* and *Traction* magazines, in association with the Doncaster & District Model Railway Club. Taking place at the Doncaster Racecourse from 13th to 14th February 1999, ticketing and further information can be obtained by telephong 01778 391156/1121.

THE MODELLING X-FILES

There's the old joke about the bloke who steps into a crowded commuter carriage, strips naked, produces a flask of hot water from his briefcase and proceeds to wash, shave, powder, deodorise and generally beautify himself, oblivious to other passengers. When one chap, overcome by clouds of talc and after-shave, lights up a big cigar, the naked man turns on him and says: "Do you mind? This is a non-smoker . . . " Well, the truth is sometimes at least as strange as fiction if the latest issue of the S Scale MRS Newsletter is to be believed. In it, member Les Bevis-Smith relates how his wife Carole – also a fine modeller and Society member – worked on some lever-frame handle etchings while commuting to work on the train. Lew wrote: "Apparently, she got one or two slightly curious looks from fellow passengers when she got needle files out of her handbag and proceeded to make brass filings. But curiosity, or disbelief, intensified when she started using her mini-blowtorch to sweat the laminations together . . . " This is clearly another one for the railway modelling X-files, along with Malcolm Mitchell using his Unimat in bed and the various submarine and airline commanders who tell us they manage a spot of modelling at work.

EXHIBITORS WANTED

Carshalton & Sutton Model Railway Club's arrived on the Internet by making details of layouts and traders booked to attend available to potential visitors. Members think they could be the first in the UK to provide such extensive pre-show information. The May 1999 event has two spaces left to fill with quality layouts and new displays are needed for the 2000 show, so if you are interested in exhibiting at either event, contact David Smith (01342 712078) or e.mail: *ron.carr@zetnet.co.uk* or web site *http://www.users.zetnet.co.uk/ron.carr/index-page5.html*

Tonbridge Model Railway Club are at present arranging their Exhibition 2000 to be held on 26th February 2000, and are looking for layouts set in the 1890s to 1910 period, or thereabouts, which can be any scale/gauge but must be fully operational. If there are any owners/clubs willing to take part, please write to B. A. Herriott, 43 Martin Hardie Way, Tonbridge, Kent, TN10 4AF with brief details.

MADDER VALLEY TO RUN AGAIN

One of the earliest model railways to give scenery and setting as much importance as track and trains, will operate at Pendon Museum during the weekend of 14th and 15th November from 2.0 p.m. to 5.0 p.m. Built by photographer and modeller John Ahern during the 1940s, it has been on static display at Pendon since his death in 1961 and this will be a rare opportunity to see it run again. The museum is located in Long Wittenham between Abingdon and Didcot (Tel: 01865 407365).

SOCIETY NOTES

Farnham & District Model Railway Club has, after 24 years, moved from Farnham Maltings to a new location. They actively model 2mm, N gauge, 4mm, 7mm and live steam. Anybody wishing to join should contact the chairman, Alan Willson, at 14 Nightingales Close, Horsham, West Sussex, RH13 5LB (01403 249514) or the secretary George Nevin, 85 Badshot Park, Badshot Lea, Farnham, Surrey, GU9 9NE (01253 332174).

Warley Model Railway Club's new secretary is David Glascott, 50 The Glades, Adridge, West Midlands, WS9 8RN (01922 457600). A new clubroom in Albert Street, Oldbury, is now open and the club's active O Gauge, OO, EM and N gauge groups meet on Tuesday and Wednesday evenings. Anyone interested in joining should contact David Glascott as above or just turn up on a Tuesday or Wednesday between 8.0 and 10.0 p.m.

Abingdon & District Model Railway Club has a new secretary, Richard Brown of 102 Eynsham Road, Botley, Oxford, OX2 9BA.

Marlow Maidenhead & District Model Railway Club are to hold their next show (in January 1999) at a larger venue – Maidenhead Town Hall, famous to many as the hospital in the 'Carry On' films. Anyone interested should contact secretary Mike Gosling at 44 Fremantle Road, High Wycombe, Bucks, or telephone Mark Pollard on 01189 321396 (evenings),

Northampton & District Model Railway Club meets on Wednesday evenings at 7.30 p.m. at their club-rooms at Kingsthorpe Community Centre, Tolgate Close, off Mill Lane, Northampton, where there is always a welcome for new members. The secretary Peter Stafford can be contacted on 01604 580844.

Wakefield Railway Modellers' Society has a new secretary. He is John Farline of 21 Lindale Mount, Alverthorpe, Wakefield, West Yorkshire, WF2 0BH. The club has no less than seven layouts on the go and anyone interested in membership should contact John, enclosing an SAE.

HELP WANTED

P. R. Iliff is currently researching Cadeleigh (formerly Cadeleigh & Bickleigh) station in the Exe Valley in Devon, with a view to building a 4mm scale model of the station as it appeared between 1929 and 1934. Any photographs of the station and yard, or information, will be welcome. Details relating to the north end would be particularly helpful. All expenses will be reimbursed. Contact him at 6 Southfield Way, Tiverton, Devon, EX16 5AJ (01884) 253473.

Philip Godfrey of 36 Lovelace Road, West Dulwich, London, SE21 8JX, is working with a group of like-minded modellers on a model of London's Blackfriars Bridge station (the station on the south side of the Thames around 1965). It stopped handling passengers in 1885 but continued to take freight for some time after. If any reader has material related to this station or knows of any out-of-the-way repositories for such material, they would be very grateful to hear, and costs will be reimbursed.

We are happy to publish requests for information on the understanding that all responses are answered and reasonable postage costs reimbursed. Please note that appeals are published periodically and we cannot guarantee that they will appear in the next issue.

(Editor)

Thanks

I was greatly moved by the tribute letters in the last MRJ, as well as those sent privately, bidding me farewell as editor. They serve to underline the fact that the magazine's readership is a genuine fraternity whose kindness and generosity of spirit shine like the rare gems they are in modern publishing. This, for me, has always been MRJ's greatest strength, keeping me going through the bleakest of times, and I am profoundly grateful for it.

Rest assured that MRJ is still in safe hands. I'd never have let it go otherwise.

Bob Barlow
Cambridge

Shellac

With reference to Nick de Courtais' article on modelling coaches from traditional materials (MRJ No. 105), may I add a few comments concerning the use of shellac. I have used this material for many years for various purposes, including use as a base coat on paper and card.

Firstly, although the solvent is indeed methylated spirit, please note that this is *not* the same as methyl alcohol (or methanol to use its current name). Methanol is a very harmful substance if it is ingested or allowed to come into contact with the skin. (Meths contains only a small amount of methanol.)

Also I have noticed that although the made-up solution keeps well for a year or so, after a while it seems to lose some of its drying properties and remains permanently sticky. Therefore it is a good idea to make a fresh bottle if an important piece of work is being finished.

Graham Metcalf
York

Milk tanks

I have been following the correspondence on the subject with interest and would like to make some observations which are relevant.

Trawling through various books, I found in *Through Limestone Hills* by Bill Hudson (OPC 1989), plate 150 on page 103, a picture of a royal train arriving at Rowsley on 6th July 1933. Prominent in the foreground is a rake of three 6-wheeled milk tanks all marked 'Express Dairy. Milk for London'. The text quotes the dairy as having opened in June 1933. I am afraid that this photograph conflicts with Mr. Essery's comment in No. 103! Also in the same book at the top of page 102, plate 148 shows, in the lower right corner, the spray cooling system associated with the milk cooling plant. This was taken on 8th August 1953.

Midland through the Peak by Brian Radford (Unicorn Books, 1988) has a photograph taken on the up platform at Rowsley around 1960, and depicts a milk tank just peeping out of the dairy building behind the platform fence.

John Skinley produced a drawing for a 6-wheel GWR milk tank, numbered G133H and showing a Milk Marketing Board vehicle as in 1946. I have a copy – I don't know if Skinley drawings are still available.

John Hosegood provided me with some excellent waterslide transfers for both Express Dairies and United Dairies tanks in 4mm scale in mid-1995.

There used to be a rail-connected Express Dairies plant just south of Appleby and fairly recent photographs suggest it still exists, although it could have altered from the 1950s when I passed it regularly.

I don't know if Rowsley dairy still exists, but it is not rail-connected if it does.

Alan Rimmer
Allestree
Derby

Appleby Milk Depot

Concerning the photo in MRJ No. 105 of the lineside milk depot, I am happy to provide the following information, mostly gleaned from an article by Michael Harris in *Steam Days* (January 1997).

First of all, it is definitely Appleby, photographed – as you surmised – shortly after the end of the Second War by Hubert Foster. The development came about as a result of the expansion of Express Dairies who were keen to locate new sources of bulk supply to their London market. Milk had been moved by churn from Appleby to London prior to the construction of the works, but the distance and the length of the journey created problems in keeping milk fresh. The Appleby works (which was started in 1930 and was in full production by October 1931) was a pasteurisation and cooling plant, and from the outset moved milk to London in the new glass-lined 6-wheel milk tankers. The new plant prompted rapid development of milk traffic at Appleby (including some poaching of business from farms served by the LNER branch in Wensleydale) and the growth of business led almost immediately to an extension of the works (the section to the right of the loading platform in the photograph).

The destination for the milk was the Express Dairies bottling plant at Cricklewood. Some of the workings saw tankers attached to southbound Anglo-Scottish expresses working over the S&C, but a more typical pattern was for the tanks to be sent initially north to Carlisle, and then south on the West Coast route. Carlisle was an assembly point for milk tanks not only from Appleby but also from creameries at Aspatria and the Nestlés works at Carlisle itself. These were then formed into dedicated milk trains that in the late 1930s ran as Class A freights, taking around 8½ hours to get to London.

The peak traffic appears to have been in the middle 1950s when the workings included dedicated milk trains on both the S&C and the West Coast routes. However, in the early 1960s, competition from road haulage and policy changes by the Milk Marketing Board saw a rapid erosion of the role of railways in moving milk and Appleby was no exception. The traffic in milk from Carlisle to London was finally phased out in the period between 1964 and 1966.

As far as I know, the factory itself is still in production (though no longer in the ownership of Express Dairies and no longer with a rail link) – it produces cheese rather than milk.

Stephen Williams
Stafford

The photograph published on page 239 of MRJ No. 105 of the milk depot, instantly brought back memories of a pocket-sized guide to the route of the Thames Clyde Express which my grandmother gave me when I was around 8 or 9. A ten-minute rummage in the loft located the 2/- publication. A photograph taken from almost the same position shows a Fowler Class 4, No. 43973, shunting a string of milk wagons. The accompanying text on the adjoining page describes the scene:

> 'Just before passing Appleby a modern plant on the 'up' side displays in large letters on the wall the words 'MILK FOR LONDON'. The factory is that of the Express Dairy Co. Ltd., one of Britain's largest milk collecting and cooling centres. Milk is collected daily from 1,600 farms, cooled and pumped into rail tankers, to be dispatched each evening in time to appear on many Londoners' breakfast tables next morning.'

A route map pinpoints the depot as immediately to the south of Appleby.

Simon A. R. Ford
Kingston
Surrey

Sentinel

Further to the photograph of the 100hp Sentinel on page 230 of MRJ No. 105, reference to Russell Leitch's *The Railways of Keynsham* (RCTS, 1997, p. 70f) indicates that it was supplied new to Fry's at Somerdale in 1928 (works No. 7492) and continued to work in the factory sidings until January 1964. It was then sold for scrap, but subsequently resold to a Mr. G. R. Finbow of Bacton in Suffolk for preservation. Leitch's book does not give details of livery, but presumably it might be possible to discover this by visiting the engine, assuming it to be on public view. The Sentinel was occasionally to be seen venturing across the Keynsham–Willsbridge road with wagons for transhipment to the GWR at Keynsham, but appears to have been mainly intended for internal shunting as most of the rail traffic into the factory was transferred by main line locomotives on trip goods trains. The rail connection to Fry's (now Cadbury-Schweppes) was closed in the early 1970s, but the gateposts for the road crossing can still be seen.

Neil Burgess
Lincoln

Roger Thornton of Aldershot, Hants, offered similar information, adding that it was little used after 1956 when a diesel loco was acquired. He also remembers it being dark blue with gold insignia, although after 40 years, he cannot be certain of this. *(Ed.)*

O gauge standards

In MRJ No. 99, Jim Snowdon was sensibly advising adjusting the normal O gauge track gauge to improve running and give a better appearance of pointwork. Like him I have a 4mm scale background. The gauge debate in 4mm scale started in the 1940s with EM and has done little to assist the simplicity of working to 1:76.2 scale, so it is a little sad to find O-gaugers being tempted to adopt a multiplicity of track standards, though it may be understandable.

My first steps in 7mm scale were to buy a number of plastic wagon kits at what would now seem ridiculously low prices – something less than £5.00 each, I think. In those days, coarse scale wheels were widely available but I plumped for finescale wheelsets. Jim's article prompted me to make a careful inspection of the wheelsets in my possession. Quite a few of these finescale wheels will not run very well on 31mm gauge track. The back-to-back dimension varies between 28.8mm and 29.5mm and the effective flanges from under 1mm to over 1.3mm, making the minimum gauge advisable between 30.8mm and 32.1mm. As I am not strongly committed to gauge O, it may be that I missed an important announcement about wheel profiles 10-15 years ago, which is when

my purchases started to incorporate the narrower flange wheels.

It seems quite risky to suggest a narrowing of track gauge and the continuation of the back-to-back dimension of 29mm, especially if anyone else still has those fatter profile wheels. For myself it looks as though I will have to reprofile and regauge most of the wheelsets that I have and this will delay any progress I make in 7mm. But being put into that position means that I can choose a more practical standard than is usually found in print but which seems to already have a following. My wheels will adopt a back-to-back dimension from 29.6 to 30mm and with a narrow flange, and I would expect them to run most of the time on standard 32mm track. Pointwork flangeways will be proportionately reduced to around 1.3mm. It will mean the average O gauge wheelsets should not run through my pointwork.

My next step in reviewing *de facto* standards for my own use will be to see how reasonable the use of the 4mm scale Alex Jackson coupling hook would be in 7mm scale, providing that the potential sideways slop of any vehicle is reduced to about 1mm at the coupling hook (a combination of reducing track/wheelset and axle/axlebox slop) as I can see no reason to automatically scale tolerances and non-prototypical items up by 7:4 just because the scale used results in larger models.

Alan Austin
AMBIS Engineering
Ilford, Essex

In MRJ No. 104, James Snowdon's remarks on lead lengths and turnout radii require clarification as they are not entirely correct. If the gauge is varied, then the lead length *and* the radius are affected as both these properties are functions not only of the crossing angle, but also the gauge. If not working to S7 standards, which are based exactly on the dimensions of the prototype, the 7mm modeller has a number of options when building leads. For a given lead, e.g. with a 1 in 7 crossing, either the prototypical lead length can be retained, *or* the standard crossing angle, *or* the radius of the turnout, and the modeller's choice will be determined by which of these factors is the most important for him. Having made his choice, adjustments to the other two properties necessarily follow. The same is true for any other scale.

As a 4mm modeller working in EM gauge, faced with a similar situation to that of Mr. Snowdon and others working to finescale O standards, my preference is for the second option, retaining the standard crossing angle. Whilst both the lead length and the turnout radius are shortened in consequence of this, proportions and geometry of the lead are maintained. Moreover, if the lead forms part of a larger piece of crossing work, it can be better integrated, such as the turnout road of a 1 in 7 lead abutting a 1 in 7 diamond or compound in an adjacent parallel track.

I read the original article and have followed the correspondence with interest as I, too, have been unhappy with the appearance of crossings with the flangeways prescribed. My own solution in constructing my current layout has been to keep the gauge at 18.2mm but to reduce the flangeway to 0.75mm and increase the back-to-back wheel dimension correspondingly, the wheel flanges being 0.5mm in thickness. Not being a member of a club, I don't have to worry about interchangeability of rolling stock. Were I now starting from scratch, however, I would opt for S4 but, having amassed a fair quantity of EM stock over the years, I don't have the time or the inclination to embark upon an extensive programme of conversion, questions of cost apart.

Unquestionably, though, despite the effectiveness of these various endeavours to improve the appearance of the track, the desired result can be better and more readily achieved by the simple expedient of working from the dimensions of the prototype itself. After all, we adopt this approach in all other respects, so why not the permanent way as well?

David J. Smith
Abergavenny
Monmouthshire

I felt Andy Brown's letter (MRJ No. 104) was an unfortunate over-reaction to the comments expressed by Eric Smith (MRJ No. 103). It gave the impression that those who work to S7 standards have an almost religious approach to the quest for 100% accuracy and the banishment of all compromise.

I am a S7 modeller, currently scratchbuilding a GWR County tank, and I compromise all the time. I've even narrowed the frames a bit! (There's precious little clearance otherwise.) Although I aim to achieve a good standard of accuracy, I know I'm limited by the time I can spend on my hobby and by my own skill.

I like S7 standards for the appearance of the wheels and the lack of slop between rolling stock and track. I have no layout, nor any great desire to run my creations on anybody else's, so finescale standards don't offer me any significant benefits. I've chosen to work in S7 and I'm pleased I did so, but I'm not aware that I have any particular 'S7 philosophy' that sets me apart from finescale modellers.

Martyn Pavier
Henleaze
Bristol

I am rather saddened by the exchange of correspondence that appears to be emerging on the question of O gauge standards, primarily because the flagship journal is bothering to print it! The current exchanges of ScaleSeven versus Finescale, etc., are a tiring re-run in 7mm of what we had to put up with in 4mm scale probably 20 years ago in various magazines.

The whole debate is absolutely pointless. ScaleSeven looks absolutely superb, but it is entirely up to the individual what each wants to do and we should not decry individual choice. Several of my friends are avid Hornby-Dublo collectors and I am quite envious that they can just take their models out of the boxes and run them.

My current activities are in 4mm/EM gauge, but this avenue was pursued because of the S4/P4 bigotry of a few years ago, where the commercial supply position (particularly for driving wheels) became intolerable. Remember the declaration that Studiolith wanted people to sign. Often we are faced with another dilemma: 'If I wanted to get there, I wouldn't be starting from here!' Time moves on, most of us cannot afford to up and change just because something better comes along. Even in my sphere of activity I face these choices. I currently have a pair of Ilfracombe goods going (very slowly) through my workshop which have Jidenco tenders and frames, being assembled for split frame pick-up. Since the start of the project, Andrew Mullins has introduced his superb kit – one possible point to scrap and start again. Similarly, I purchased in advance Sharman wheels and this month see that Gibson are introducing brass-centred, steel-tyred wheels in the right size, ideal for split frame. Do I chuck the wheels in the scrap box and buy some more? No. Time and standards move on, and I suspect much of the carping over different standards is an attempt to justify individual positions. It is totally unnecessary if you are enjoying the modelling you are doing, so get on with it, but don't snipe at others who are enjoying their variant. This will also leave the letters column of MRJ free for constructive advice on modelling.

R. M. Jones
Heswall
Wirral

GEOFFREY WILLIAMS
1913-1998

It is with great regret that we record the death of Geoff Williams, modeller extraordinary, at the age of 85.

Although far from being his only achievement, most modellers who knew him will remember Geoff for his superb model of Aylesbury LNWR, a layout which has inspired all who have seen it and which featured in the pre-launch issue of MRJ (No. 0). When in 1959 I first had the privilege of visiting Geoff's home, then in Cheshunt, an earlier version of Aylesbury was in the process of cannibalisation for components for the Mark II version. The first version had come to be regarded as not being as good as it could or should be and led to the rebuilt model, which occupied Geoff and two of his three sons for the next thirty years or more.

In recent years immobility had prevented Geoff from climbing into the loft in which the model is located, and, in his own words, Aylesbury had become just a pleasant memory.

Geoff, I know, was particularly delighted with the relationship he had with his sons, Bob and Mike, arising from their shared enthusiasm for the project and for all things LNWR. All three have been heavily involved with the LNWR Society and their knowledge of the LNWR is formidable.

Modellingwise, Geoff set very high standards (hence the early rebuilding) and many innovative techniques were used. Nothing was built without extensive research – among many sources the HMRS, of which Geoff was a member for some 40 years. Bearing in mind that in 1958 EM was in its infancy, Geoff's 18.2mm gauge trackwork was way ahead of its time. Equally impressive was Geoff's ability to produce, from what would now be considered quite crude kits, accurate and convincing locomotives and rolling stock. Another especially effective technique was his method of perspective modelling, so that a layout actually only a few feet deep seems very much bigger – with most of the town of Aylesbury apparently included.

Apart from wartime service in the Royal Navy, Geoff's entire career was spent as an engineer on the construction side with Tottenham & District Gas Company, latterly Eastern Gas. It will come as no surprise, therefore, that Aylesbury's model gas works is so realistic, nor that when wheelchair-bound for the last few years, Geoff turned to modelling the warships he knew during his naval service.

All in all, Geoff was a remarkable man who inspired many and, quietly in the background, was a major influence in the transition of our hobby from very basic trainset railway modelling towards the construction of historically accurate models of actual railways, and very well made models at that.

Our condolences to his widow, Beryl, three sons and grandchildren.

Ray Hammond

DIARY

31 Oct./1 Nov.
The Model, Toy & Train Action Show organised by Warners Group Publications at Telford International Centre, Telford, Shropshire. 10.00 – 6.00 (5.00 Sun). £4.00/£2.50/£13.00.

NOVEMBER

7/8 **Warley Model Railway Club** national model railway exhibition at Hall 6, National Exhibition Centre, Birmingham. 10.00 – 6.00 (5.00 Sun). £6.50/£4.50/£19.00.

7/8 **Brighton Model Railway Club** 20th annual exhibition at Dorothy Stringer School, Loder Road, Brighton. 10.00 – 5.30 (5.00 Sun). £2.20/£1.10/£1.50/£6.00.

13-15 **Newcastle & District Model Railway Society** exhibition at the University Ballroom, off the Haymarket, Newcastle upon Tyne. 12.00 noon – 9.00 (Fri), 10.00 – 8.00 (Sat), 10.00 – 5.00 (Sun). £2.50/£1.50.

14/15 **Hampton Court Model Railway Society** Tolworth Showtrain 98 at the Tolworth Recreation Centre, Fullers Way North, Tolworth, Surbiton, Surrey. 10.00 – 6.00 (5.30 Sun). £3.00/£1.50/£7.50.

14/15 **Gresley Model Group** exhibition at Gresley Social Centre, Park Road, Church Gresley, Swadlincote, Derbyshire. 10.30 – 5.00. £1.50/£1.00/£3.50.

15 **Halifax Model Railway Club** open day at its clubrooms, 5 Deal Street, Halifax, West Yorkshire (200 yds from the railway station). 10.00 – 4.00. Admission free but donations welcomed.

21 **Winchester Gauge O Group** American and Continental 7mm exhibition at Kings' School, Romsey Road, Winchester, Hants. 11.00 – 4.30. £2.50.

21 **Bolton & District Model Railway Club** Autumn Modelling Extravaganza at the clubroom, New Chapel URC Sunday School, New Chapel Lane, Horwich. £1.00/50p.

21 **Royston & District Model Railway Club** 12th exhibition at Meridian School, Garden Walk, Royston, Herts. 10.30 – 5.00. £2.00/£1.00.

21/22 **Chippenham Bridge Centre** model railway exhibition at The Bridge Centre, Bath Road, Chippenham, Wilts. 10.00 – 5.00. £2.50/£2.00/£1.50. Profits will go to local charities.

21/22 **Watford and District Model Railway Club** Watford Finescale Extravaganza at Westfield School, Tolpits Lane, West Watford, Hertfordshire. 10.30 – 6.00 (5.00 Sun). £4.00/£3.00 (accompanied children under 12 – free).

21/22 **Thornbury & South Gloucestershire Model Railway Club** exhibition at The Chantry, Castle Street, Thornbury, near Bristol. £2.00/£1.50/£1.00.

21/22 **Alsager Railway Association** exhibition at the Alsager Civic Centre. 10.00 – 6.00 (5.00 Sun). £2.00/£1.20/£5.00.

21/22 **Solent Model Railway Group** exhibition and model show at Oaklands Community School, Fairisle Road, Lordshill, Southampton. 10.00 – 5.00. £2.25/£1.25/£6.00.

27-29 **Wakefield Railway Modellers' Society** exhibition at Thornes Park Athletics Stadium, Horbury Road (A642), Wakefield. 6.00 – 9.30 (Fri), 10.00 – 8.00 (Sat), 10.00 – 5.00 (Sun). £2.80/£1.60/£7.50.

28 **E.M. Gauge Society** Expo EM Malvern at the Youth Centre, Albert Road North, Great Malvern. 10.30 – 5.00. £3.00 non-members, £2.00 members.

28 **Letchworth Model Railway Society** exhibition at Norton School, Norton Road, Letchworth, Herts. 10.00 – 5.00. £2.50/£1.50/£1.00/£6.50.

Expo EM Malvern

Saturday 28th November 1998
10.30 a.m. – 5.0 p.m.
at The Youth Centre,
Albert Road North, Great Malvern.

£3.00 non-members. £2.00 members.

LAYOUTS (EM)

Eastwell Ironstone	
Wellington (Salop)	Rare appearance! Large!
Ruyton Road	
East Ilsley	New
Coedway	
Lower Upham	New
Enstone Halt	New to Expo
Loch of Kyleash	New to Expo
Colyton Road (18.83mm)	New

DEMONSTRATIONS ANTICIPATED

Bob Blood: Steam Age coach & wagon construction; Nigel Burkin: Modern image; Phil Eames: EM diesel conversions; Kier Hardy: 1970s locomotives & freight stock; Eric Jones: Steam loco construction & clinic; Ian Rathbone: Painting & lining; David Stone: Modelling buildings; Brendon Walsh: Building track; John Webb: Modelling scenery.

TRADERS INVITED

Roger Carpenter, London Road, David Cole, Comet, Roxey, GW Models, D.M. Newband, Sharman Wheels, Branchlines, Connoisseur, Blacksmith/Cove, Appleby, EMGS supplies.

Refreshments, free car park. Malvern has good train and bus links. Tel. contact: Keith Patrick on 01684 562290.

28/29 **Swindon Model Railway Club** Modrail 98 at Greendown Community School, Grange Park Way, Grange Park, Swindon, Wilts. 10.00 – 5.00. £3.00/£1.00/£2.00/£7.00.

28/29 **Chester Model Railway Club** exhibition at the Town Hall, Chester. 9.00 – 5.00. £2.00/£1.00.

29 **Merseyside Model Railway Society** open day at Brassey Street School, Birkenhead. 10.00 – 5.00. Admission free.

DECEMBER

4-6 **Manchester Model Railway Society** 62nd exhibition at the New Century Halls, Corporation Street, Manchester. 5.00 – 9.30 (Fri), 10.00 – 7.00 (Sat), 10.00 – 5.30 (Sun). £3.50/£2.00/£7.00.

5/6 **Darlington Model Railway Club** exhibition at the Darlington College of Technology, Cleveland Avenue, Darlington. 10.00 – 5.00. £2.00/£1.00.

6 **West London O Gauge Group** 12th annual 'Langley O Gauge Show' at Langley Community Centre, Langley Road, Langley, near Slough, Berks. 10.00 – 5.00. £2.00/£1.50.

12 **Mirfield Fire Station Sports and Social Club** model rail exhibition at Mirfield Fire Station, Huddersfield Road, Mirfield, West Yorkshire and adjacent halls. 10.00 – 4.00. £1.50/75p.

12/13 **Wigan & District Model Railway Society** exhibition at Robin Park Arena & Sports Centre, Loire Drive, Newtown, Wigan. 10.00 – 7.00 (5.00 Sun). Admission prices not advised.

19 **North Road Railway Club** Broadway Model Railway Exhibition at Plymstock Community Centre, The Broadway Car Park, Plymstock, Plymouth. 10.30 – 4.30. £1.00/50p.

HISTORICAL MODEL RAILWAY SOCIETY

Bedford Area: 28th October 1998. 7.30 p.m. at the Addison Centre, Kempston. 'Coastal shipping of the British Isles': Allan Sibley.

Bletchley Area: 25th November 1998. 7.30 at Bletchley Park Mansions, Bletchley. 'Severn Valley Railway and railway preservation': J. Houlder. *This meeting will be an all ticket event. Tickets are free and may be obtained from John Chamney (Tel. 01442 851214).*

Bristol Area: 2.30 at the Somerset Room, Saltford Hall, Saltford, near Bristol.

31st October 1998. 'St. Pancras to Harpenden – Operations in the 1950s': Arthur Turner.

21st November 1998: 'William Dean – a locomotive biography': Brian Arman.

12th December 1998: 'History of Railways around Bristol': Terry Nicholls.

East Midlands Area: 7.30 at the 'William IV', Sutton Road, Mansfield.

11th November 1998: 'Building Coaches': Steve Banks.

9th December 1998: 'The LD&ECR and Langworth Junction': Ken Grainger.

Essex Area: 7.45 at St. Mary's Church Centre, Great Baddow, Chelmsford.

27th November 1998: 'A modeller's view of the S&D': Phil Chopping.

11th December 1998: Christmas DIY evening.

London Area: 6.30 at The Model Railway Club, 6 Calshot Street, London N1, near King's Cross Railway Station.

2nd November 1998: 'Modelling Wadhurst': Peter Swift.

7th December 1998: Members' own evening – bring along something of interest. All welcome.

Worcester Area: 11th November 1998. 7.30 at The Cherry Orchard, Orchard Street, Worcester. 'An evening with Keith Patrick': Keith Patrick.

Thieves recently broke into the home of Derek Ascott to steal a large quantity of 'O' gauge models including a green SR 4–4–0 with tender No. 137, an SR horse-box, a milk road tanker on wagon, plus a diverse selection of horse and motor vehicles – most of them scratchbuilt or rebuilt and therefore unique. If you think you can help, either contact Derek on 01293 882334 for a more detailed list or telephone East Grinstead police on 01342 321155 quoting Crime No. N41/3430/98. A £1,000 reward is being offered for information leading to their return.

WARLEY NATIONAL MODEL RAILWAY EXHIBITION

Sponsored by Peco, Graham Farish, Bachmann Branch-Line, and Midland Counties Publications

at the
National Exhibition Centre, Birmingham

Saturday 7th November 1998
10.00 a.m. to 6.00 p.m.
Sunday 8th November 1998
10.00 a.m. to 5.0 p.m.

Over 50 model railways – Gauges Z to 1 and bigger
Over 100 specialist trade stands
Modelling demonstrations
Most major scale and gauge societies present
Preservation and special interest societies

LAYOUTS

10mm scale
Uganda Railway 1900 – Derek Williams

16mm scale
Pont-ar-Fynach – Live steam from the Warwickshire Group of 16mm NG Modellers

7mm scale
Tidmeric Minerals Company – Twickenham & District MRC
North Foreland – John Smith
Tewkesbury Quay – Orpington & District MRS
Lynton – Phil Crathorne
College Grove – Alan Redgwick
Oval Ash G – John Allison
Alexandra Yard – John Dale
Happisburgh – Model Railway Club
Elmwell Village Depot – Brian Jenkins
Stoke Fleming – Alan Searle
Teign House Sidings – Bob Harper
Bottrill Street Yard – 7mm on an ironing board! Rev. Nigel Adams

¼in:1ft scale
Camp 4 on Chop 3 Ridge – American logging from Murray Reid

4mm scale 18.33mm gauge
Middlepeak Wharf – Geraint Hughes
Great Bardfield – South Hants MRC
Midsomer Norton – South Hants MRC

4mm scale 18.2mm gauge
New Hayden Colliery – Stafford MRC
Angel Bank – Chris Hewitt and Liverpool MRS

4mm scale 16.5mm gauge
Ashdan Sidings – Barry Platt
Alton – Railway Enthusiasts Club
Trehayn – Bodmin & District MRC
Crewlisle – 'Under the wires', Peter Goodman
Melbridge Dock – Philip Parker
Russell Bridge – Stephen Adcock
Haswell Moor – Snowy scene, Alan Lister
Oakley – Sutton Coldfield Railway Society
Hasland sheds – Wingfield Railway Group
Hewis Bridge – Ian Porteous
Dunnan Lane – Quinborne & Halesowen Association of Railway Modellers
Queens Cross – Warley MRC OO Club
Thomas the Tank Engine – Warley MRC

4mm Narrow Gauge
Ballyfoyle – Irish 3ft gauge, Ian Hallworth
Aberdale – Welsh slate, Dale Gillard

HO scale
Watlington – British, Mick Scarrow
Mythic – Amtrak, Allan Trotter
Row Pass – American, Colin Hobson
Tacoma Wharves – American, Roger Epps
Mayfield – East German, Peter Martin
ZOB – Austrian mixed gauge, Brian Harrap

3mm scale
Caher Patrick – Irish narrow gauge, C. Insley

N gauge
Lynford junction – Steven Wright
Ormston Town – Bridgend MRC
Mandlebury Central – Milton Keynes MRS
Littlewood – Richard Deas
Waltham – Pauline McKenna & Steve Titheridge
Brandywine Junction and Chetwood – Alan Bodell
Zeitz – David O'Rourke
Rio Bravo Industries – J. Farell
Temple Dene – Overhead electrics, Warley MRC
Little Norton – Edward Seed

2mm fine scale
Baldown Junction – Bill Rankin
Masham Station – Tony Simms

1/8in scale 1/4in gauge
Semerdale Railway – David Naylor

Z gauge
Binden am Rhine – Graham Jones

Collectors' Layouts
Classic train set – Hornby Dublo, John New
Trix collectors layout – Trix Twin Collectors Association

Demonstrations and full trade support.

Admission prices
(on the day at the door)
Adult: 1 day – £6.50
2 day – £11.00
Child/Snr Citizen/UB40
1 day – £4.50
2 day – £8.00
Families
(2 adult/3 children)
1 day only – £19.00

Advanced tickets available at discounted prices – details and booking form available from WNMRE, Advanced Tickets, 52 Calverley Road, Birmingham B38 8PW (SAE please).

Credit Card sales – NEC Box Office Tel 0121 767 4499.

New Ex-WD Austerity 2-8-0

and tender in 4mm scale

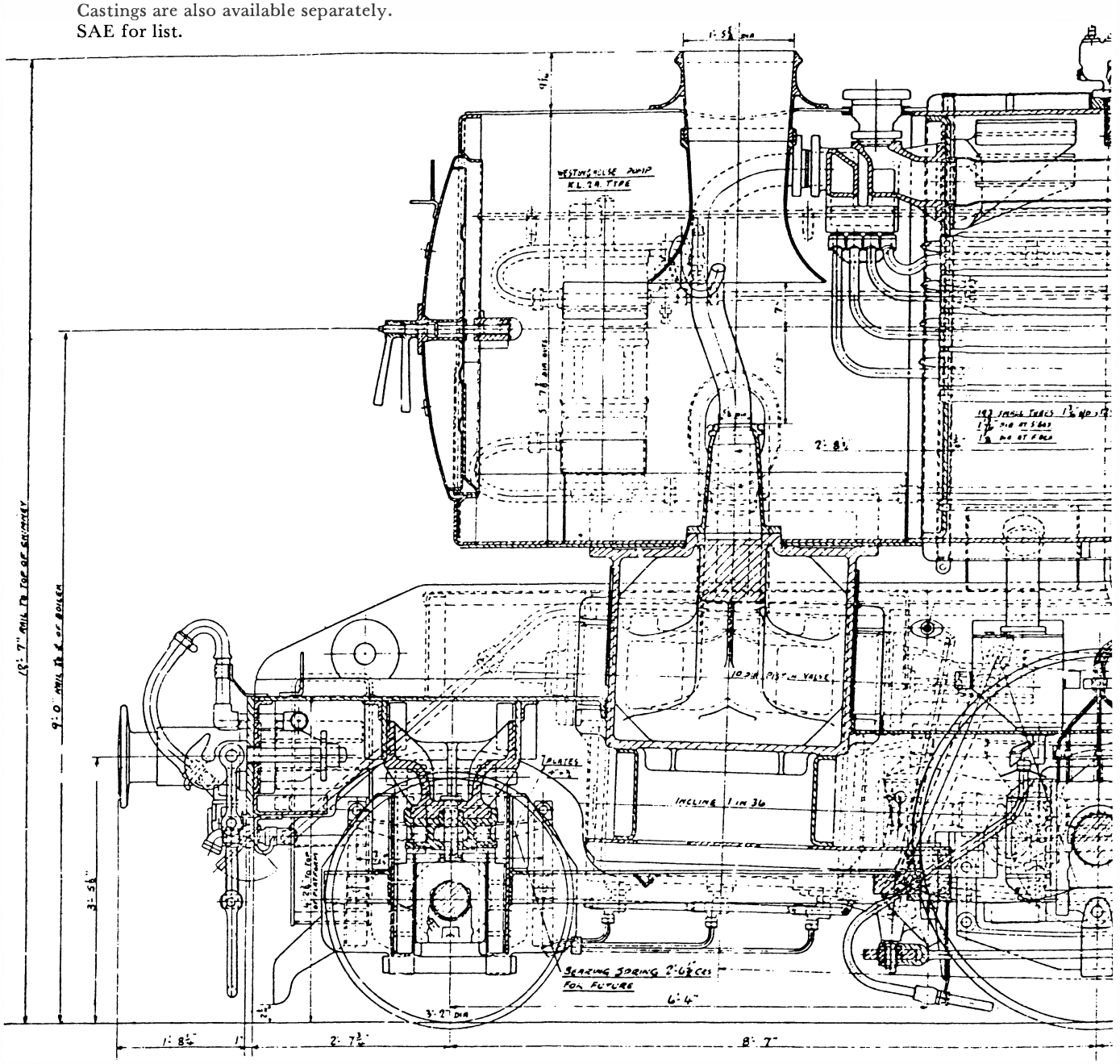
Love them or hate them, there were over 700 of these instantly recognisable locomotives clanking around postwar railways. The kit covers the surprising number of modifications made by the E/NE/LM regions.

There are many brass detail castings in this comprehensive etched kit and clear instructions fully describe assembly. Full springing is a feature. Only wheels, gears and motor need to be added.

A highly detailed model of a common locomotive.

Price: £138.00 plus £2.50 P & P.

Castings are also available separately.
SAE for list.



Dave Bradwell, South Muirnich Cottage, Gorthleck, Inverness, IV1 2YP.
Tel: 01456 486377

LONG SHOT DEPARTMENT

Tim Shackleton is looking for the small supplementary kit – containing coupling rods, gear case cover, jackshaft and bearings – that Sayer Chaplin produced for their 1949-vintage LMS diesel shunter.

Offers of help c/o the MRJ editorial office please.

WATFORD FINESCALE EXTRAVAGANZA

Saturday 21st November 1998 : 10.30 a.m. - 6 p.m.
Sunday 22nd November 1998 : 10.30 a.m. - 5 p.m.

Once again the Watford & District Model Railway Club has brought together twenty of the best finescale layouts from around the country in all the most popular scales and gauges.

Intended for every finescale modeller, committed and aspiring, this is the place to see the best models, get the best advice and to make all your railway modelling purchases.

Trade support: Alan Gibson, Ambis Engineering, B.H. Enterprises, Bill Hudson Transport Books, Brassmasters, C & L Finescale, Comet Models, D & S Models, D&E Videos, Dart Castings, D.M. Newband Books, Duncan Models, Eileen's Emporium, Exactoscale, Fourtrack Models, Freestone Model Accessories, Geoff Gamble (Books), Green Scene, Ian Kirk, Isinglass Models, London Road Models, Martin Finney, POW Sides, Red Dog, Shire Lane, Three Counties Models, Walsworth Models and several more.

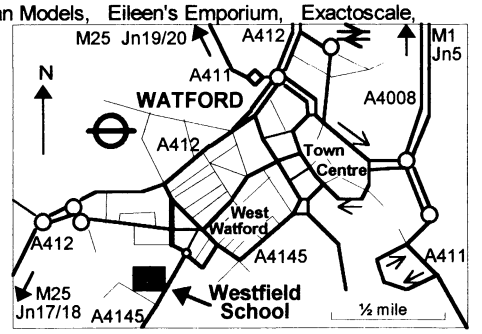
Scale and Line Societies - Demonstrations - Static displays

Westfield School, Tolpits Lane (A4145), West Watford

Admission: £4 Adults ; £3 Senior Citizens and children 12-16

***FREE BUS* Service to the Extravaganza**

Every hour:-	*Watford Junction Station*	*1015 - 1715 (1615 Sun)*
	Watford (Met.) Station	*1025 - 1725 (1625 Sun)*



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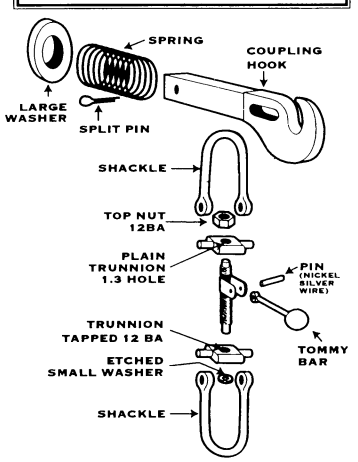

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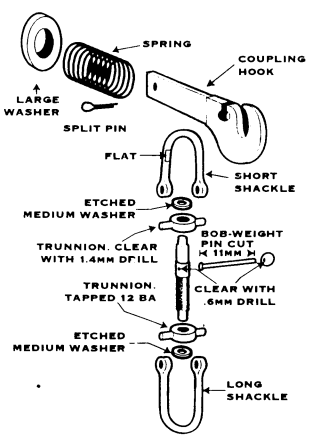

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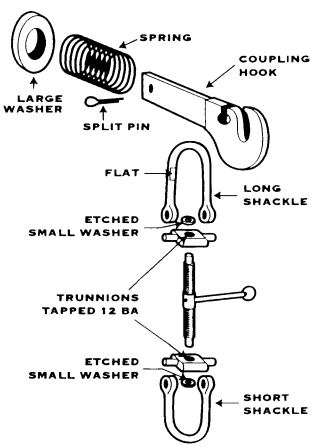

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